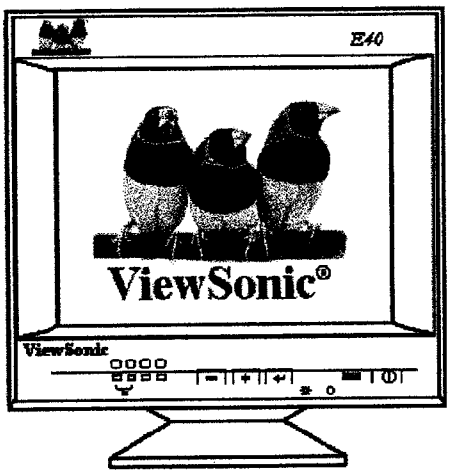
# Service Manual

# ViewSonic E40-3

## Model No. VCDTS21384-1

## *14" Digital Controlled Color Monitor*
## *$E^2$ Series*




(Rev. 2 – June 1999)

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# Revision History

| Revision | Date | Description Of Changes | Approval |
|---|---|---|---|
| 1.0 | 4/26/99 | Initial Issue | T. Sears |
| 2.0 | 6/22/99 | Corrected Model # on Cover | T. Sears |
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# 1. SAFETY PRECAUTIONS

(A). Observe all safety related notes located inside the monitor cabinet.

(B). Operation of the monitors inside the cabinet or with the cover removed may involve a shock hazard from the power supply. No work on these monitors should be attempted by anyone who is not thoroughly familiar with the necessary precautions when working on high voltage equipment's.

(C). Do not install, remove or handle the picture tube in any manner unless shatter proof goggles are worn. People not so equipped should be kept away while handling picture tubes. Keep picture tubes away from the body while handling.

(D). Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-RAY radiation or other hazards.

(E). Before returning a serviced display to the customer, a thorough safety test must be performed to verify that the display is safe to operate without danger of shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screw heads. Test method for current leakage is as follows:

(a) Plug the AC line core directly into rated AC outlet (do not use a line isolation transformer during this check).

(b) Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner: Connect a 1500 ohms 10 watt resistor, paralleled by a 0.15mfd, AC type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the combination of 1500 ohms resistor and 0.15mfd capacitor.

(c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.

(d) Voltage measured must not exceed 0.3 volts RMS. This corresponds to 0.2 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

# 2. GENERAL TECHNICAL DATA

## I. General

A. AC input100 ~ 240 Vac, 60/50 Hz
B. Power consumption80W ( maximum )
C. Operating temperature5 ~ 35(41 ~ 95)
D. Weight(N.W/G.W)11.4/13kg
E. Dimensions ( WHD )356364379 mm

## II. CRT specification

A. SIZE14 inch diagram
B. PhosphorP22 medium short persistence
C. Dot pitch0.28 mm
D. Deflection angle90 degree
E. FaceplateTint non-glare
Anti-static treatment

## III. Video input signal

A. Amplitude0.7 Vp-p analog input
B. Input impedance75 ohms
C. Polaritypositive bright

## IV. Sync input signal

A. Sync levelTTL level
B. Sync polaritypositive or negative
C. Horizontal frequency31 ~ 50KHz
D. Vertical frequency 50 ~ 90Hz

## V. D-Sub connector Pin Assignment

| Pin No. | Assignment | Sensitivity |
|---|---|---|
| 1 | Red video input | 0.7 Vp-p analog/75Ω |
| 2 | Green video input | 0.7 Vp-p analog/75Ω |
| 3 | Blue video input | 0.7 Vp-p analog/75Ω |
| 4 | Ground | |
| 5 | Self test input | Low if connected to computer |
| 6 | Red video ground | |
| 7 | Green video ground | |
| 8 | Blue video ground | |
| 9 | No connection | |
| 10 | Ground | |
| 11 | Ground | |
| 12 | SDA | |
| 13 | Horizontal sync input | TTL level |
| 14 | Vertical sync input | TTL level |
| 15 | SCL | |

## 6. SIGNAL INPUT

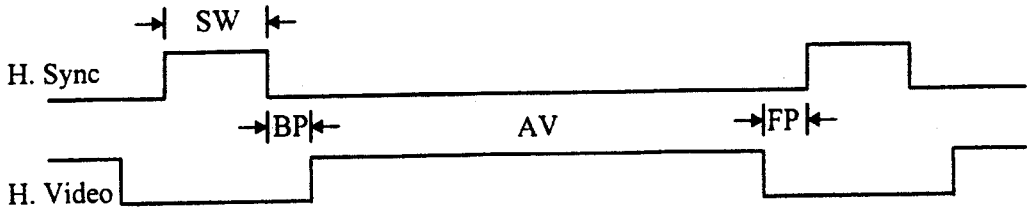
**A. Signal Timing**

| Mode | | (1) VGA | (2) VGA | (3) VGA | (4) SVGA | (5) 8514A |
|---|---|---|---|---|---|---|
| Resolution | | 640*350 | 720*400 | 640*480 | 800*600 | 1024*768 |
| H. Sync Polarity | | | | | | |
| V. Sync Polarity | | | | | | |
| H. Frequency | (KHz) | 31.468 | 31.468 | 31.468 | 35.156 | 35.522 |
| H. Period | (us) | 31.778 | 31.778 | 31.778 | 28.444 | 28.151 |
| Front Porch(FP) | (us) | 0.636 | 0.636 | 0.636 | 0.666 | 0.178 |
| Sync Width(SW) | (us) | 3.813 | 3.813 | 3.813 | 2.000 | 3.920 |
| Back Porch(BP) | (us) | 1.907 | 1.907 | 1.907 | 3.556 | 1.247 |
| Blank | (us) | 6.356 | 6.356 | 6.356 | 6.222 | 5.345 |
| Active Video | (us) | 25.422 | 25.422 | 25.422 | 22.222 | 22.806 |
| V. Frequency | (Hz) | 70.087 | 70.087 | 59.941 | 56.250 | 86.958 |
| V. Period | (ms) | 14.268 | 14.268 | 16.683 | 17.778 | 11.500 |
| Front Porch(FP) | (ms) | 1.175 | 0.381 | 0.317 | 0.028 | 0.014 |
| Sync Width(SW) | (ms) | 0.064 | 0.064 | 0.064 | 0.057 | 0.113 |
| Back Porch(BP) | (ms) | 1.907 | 1.112 | 1.049 | 0.626 | 0.563 |
| Blank | (ms) | 3.146 | 1.557 | 1.430 | 0.711 | 0.690 |
| Active Video | (ms) | 11.122 | 12.711 | 15.253 | 17.067 | 10.810 |
| Interlaced | | NO | NO | NO | NO | YES |

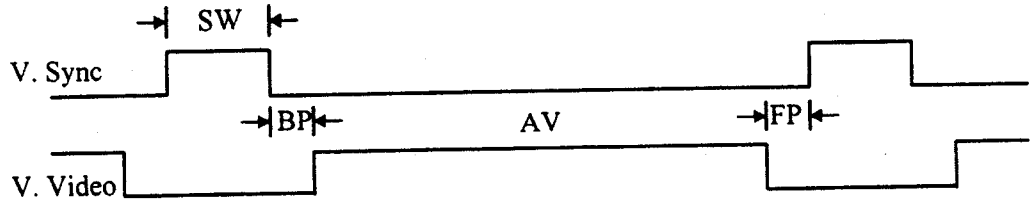
| Mode | | (6) VESA | (7) VESA | (8) VESA | (9) VESA | (10) VESA |
|---|---|---|---|---|---|---|
| Resolution | | 640*480 | 640*480 | 800*600 | 800*600 | 1024*768 |
| H. Sync Polarity | | | | | | |
| V. Sync Polarity | | | | | | |
| H. Frequency | (KHz) | 37.860 | 37.500 | 37.879 | 46.875 | 48.363 |
| H. Period | (us) | 26.413 | 26.667 | 26.400 | 21.333 | 20.667 |
| Front Porch(FP) | (us) | 0.508 | 0.508 | 1.000 | 0.323 | 0.369 |
| Sync Width(SW) | (us) | 1.270 | 2.032 | 3.200 | 1.616 | 2.092 |
| Back Porch(BP) | (us) | 3.810 | 3.810 | 2.200 | 3.232 | 2.462 |
| Blank | (us) | 5.587 | 6.350 | 6.400 | 5.171 | 4.923 |
| Active Video | (us) | 20.317 | 20.317 | 20.000 | 16.162 | 15.754 |
| V. Frequency | (Hz) | 72.809 | 75.000 | 60.317 | 75.000 | 60.004 |
| V. Period | (ms) | 13.735 | 13.333 | 16.579 | 13.333 | 16.666 |
| Front Porch(FP) | (ms) | 0.026 | 0.027 | 0.026 | 0.021 | 0.062 |
| Sync Width(SW) | (ms) | 0.079 | 0.079 | 0.106 | 0.064 | 0.124 |
| Back Porch(BP) | (ms) | 0.528 | 0.427 | 0.607 | 0.448 | 0.600 |
| Blank | (ms) | 0.634 | 0.533 | 0.739 | 0.533 | 0.786 |
| Active Video | (ms) | 12.678 | 12.800 | 15.840 | 12.800 | 15.880 |
| Interlaced | | NO | NO | NO | NO | NO |

## B. Signal Timing Chart

### 1. Horizontal Timing Chart



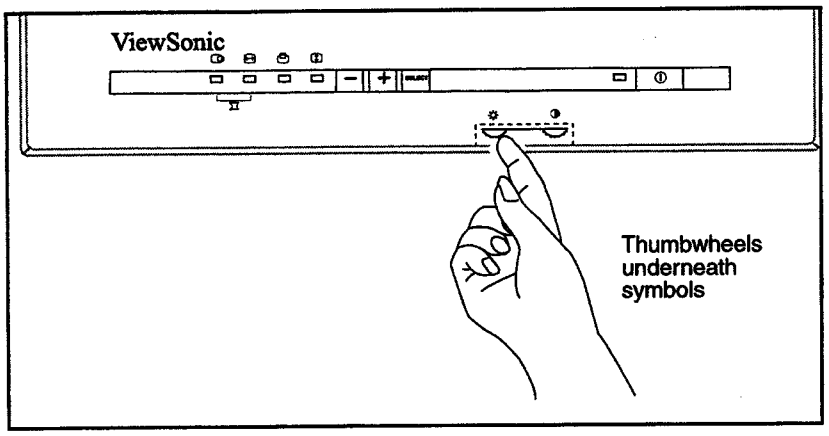

### 2. Vertical Timing Chart




SW = Sync Width FP = Front Porch AV = Active Video BP = Back Porch

# 7. TIMING DIAGRAM & TABLE

## A. External Control




**BRIGHTNESS** adjusts background black level of screen image. Thumbwheel is hidden underneath the symbol.
Turn thumbwheel to increase or decrease brightness.

**CONTRAST** adjusts foreground white level of screen image. Thumbwheel is hidden underneath the symbol.
Turn thumbwheel to increase or decrease contrast.

**HORIZONTAL POSITION** moves the screen image left or right.
[-] moves screen to left, [+] moves screen to right.

**HORIZONTAL SIZE** adjusts the width of the screen image.
[-] decreases width, [+] increases width.

**VERTICAL POSITION** moves the screen up and down.
[-] moves screen down, [+] moves screen up.

**VERTICAL SIZE** adjusts the height of the screen.
[-] decreases screen height, [+] increases screen height.

**PINCUSHION,** with two LEDs lit up, straightens vertical sides of the screen.
[-] curves vertical edges inward, [+] curves vertical edges outward.

## B. Digital Features

I. This monitor has adapted an advanced CPU to control the H-CENTER, the H-SIZE, the V-CENTER, the V-
A. SIZE, PINCUSHION, and it will auto save into memory the image modes whenever the user changed them.
II. This monitor includes 10 sets of factory preset timing (see the following table) and 25 sets of user definable
A. timing.
III. Push up-down key together and wait 0.5 second, the image automatically recalls factory presets.

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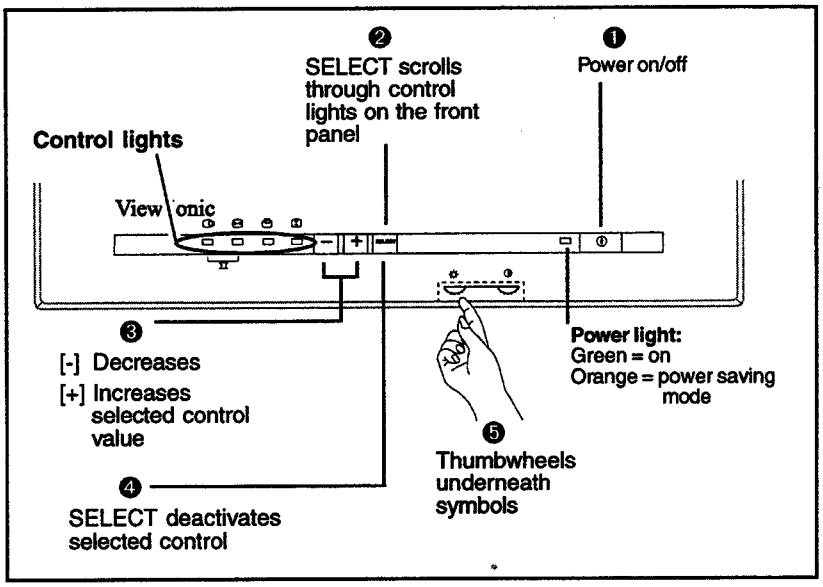
## 8. USING TACTILE SWITCH FUNCTIONS

- Press the function button to activate the LEDS and scroll through functions.
- Tactile switch icons and meanings.

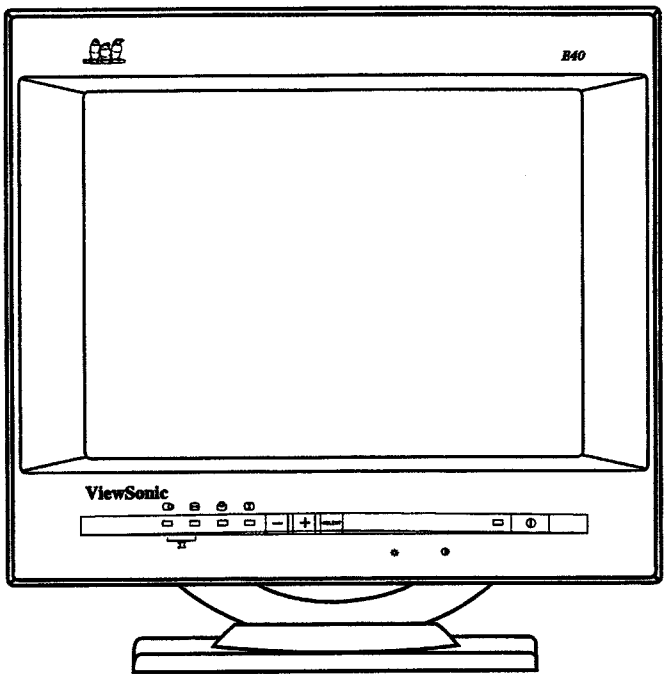
Adjust your **ViewSonic *E40*** monitor using the control buttons on the front panel in the sequence shown below. Also see page 8 for more detail on each control.

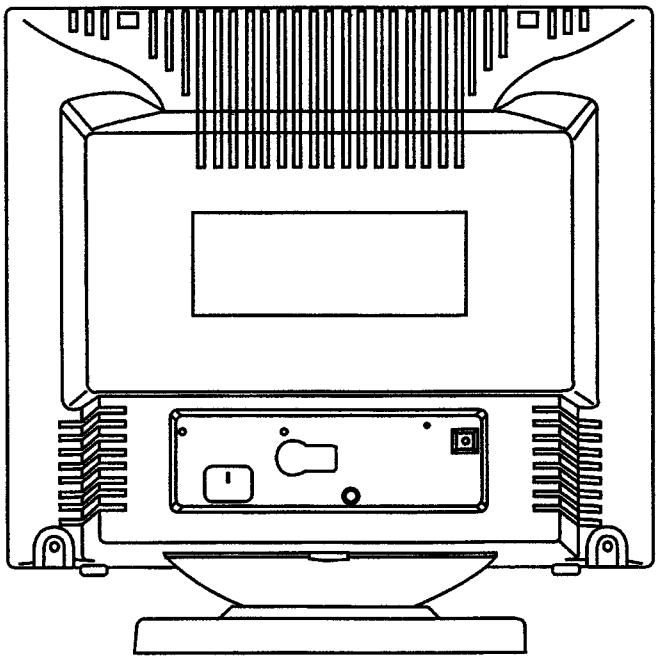
### Front Control Panel




**Note:**
The monitor automatically degausses when you turn on the monitor. Degaussing removes magnetic field build up that can affect color purity and convergence. If you turn on the monitor and need to degauss again, wait 15 minutes before turning the unit on again.

# 3. MONITOR - FRONT AND REAR VIEWS



# 4. ADJUSTMENT INSTRUCTIONS

## 1. GENERAL

(a) Ac input: 100 ~ 240 Vac(10%)

(b) Instruments:

(1) Signal Generators:

--Chroma: model:2130,2135,2250

--VG812,VG815

--PC: it must can apply the exact timings which is listed in the engineering spec.

(2) Color analyzer: CA100 (Minolta)

(3) Digital voltmeter (or multimeter)

(4) Oscilloscope

(c) It must warm up at least 30 minutes before adjustment of white balance and convergence.

(d) It need not any signal be applied to the monitor when the free running frequency is being adjusted.

## 2. VOLTAGE SETTING

(a) Apply a video signal in the 640 × 480 with 31.468KHZ/60HZ Mode.

(b) Select the "cross-hatch" pattern.

(c) Set the brightness front control (VR 404) and contrast front control (VR405) to the maximum position.

(d) Test point: TP3 on CRT board.

(e) Adjust VR801 so that TP3 is 120.05V (11.95V ~ 12.05V).

(f) Adjust VR832 set the HV is 240.1KV with the HV probe.

## 3. ADJUSTMENT OF FREE RUNNING FREQUENCY

(a) Apply a video signal in the 640 x 480 with 31.46KHz / 60Hz mode.

(b) Select the "Cross-hatch" pattern.

(c) Set the brightness and contrast front control to the maximum position.

(d) Connecting TP2 to GND.

(e) Adjust VR401 so that the picture on the screen is at optimum state.

(f) To separate TP2 from GND.

## 4. FOCUS SETTING

(a) Apply a video signal in the 800 × 600 with 46.9KHZ / 75HZ mode.

(b) Select the character pattern ( "pattern 86" in chroma 2135 )

(c) Set the brightness and contrast front control to the maximum position.

(d) Adjust the focus VR on the FBT so that the picture at 2/3 of the diagonal lines (from center to four corner) the displayed screen is as sharp as possible.

## 5. ADJUSTMENT OF WHITE BALANCE (W/B)

### 5.1 Adjustment of cut-off

(a) Apply a signal in the 1024 × 768 with 48.363KHZ / 60HZ mode.

(b) Select the "raster" (no video signal ) pattern.

(c) Set the brightness and contrast front control to the maximum position.

(d) Adjust the screen VR on the FBT so that the brightness reading value Y of the displayed screen is 0.6F. ± 0.1 F.L .

(e) Fixed VR906

(f) Adjust VR901 so that the reading value y of color analyzer (CA-100) is 0.303 ± 0.005.

(g) Adjust VR903 so that the reading value x of color analyzer (CA-100) is 0.281 ± 0.005.

(h) Repeat the steps (d) to (g) until the reading value of color analyzer is correct.

### 5.2 Adjustment of sub-contrast and high brightness w / b:

(a) Apply a video signal in the 1024 × 768 with 48.363KHZ / 60HZ mode.

(b) Select the "white block" pattern (50mm × 50mm) .

(c) Set the brightness front control to the center click position and the contrast front control to the maximum position.

(d) Adjust VR406 so that the brightness reading value Y is 50 F.L ± 1.0 F.L .

(e) Select the "full white" pattern.

(f) Set the brightness to the center click position and contrast to 10 F.L .

(g) Adjust VR904 and VR906 so that the reading value x is 0.281 ± 0.003 and y is 0.311 ± 0.003 .

## 6. ADJUSTMENT OF FULL WHITE BRIGHTNESS

(a) Apply a video signal in the 1024 × 768 with 48.363KHZ / 60HZ mode.

(b) Select the " full white" pattern.

(c) Set the brightness front control to the center click position and the contrast front control to the maximum position.

(d) Adjust VR407 so that the brightness reading value Y is 32 F.L ± 1 F.L .

## 7. H-CENTER SETTING

(a) Apply a Video Signal in the 1024 × 768 with 48.363KHZ / 60HZ mode.



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(b) Select the "cross-hatch" pattern.

(c) Set brightness front control to the maximum position.

(d) Adjust S401 so that the "Raster" is set at the center position of the displayed screen.



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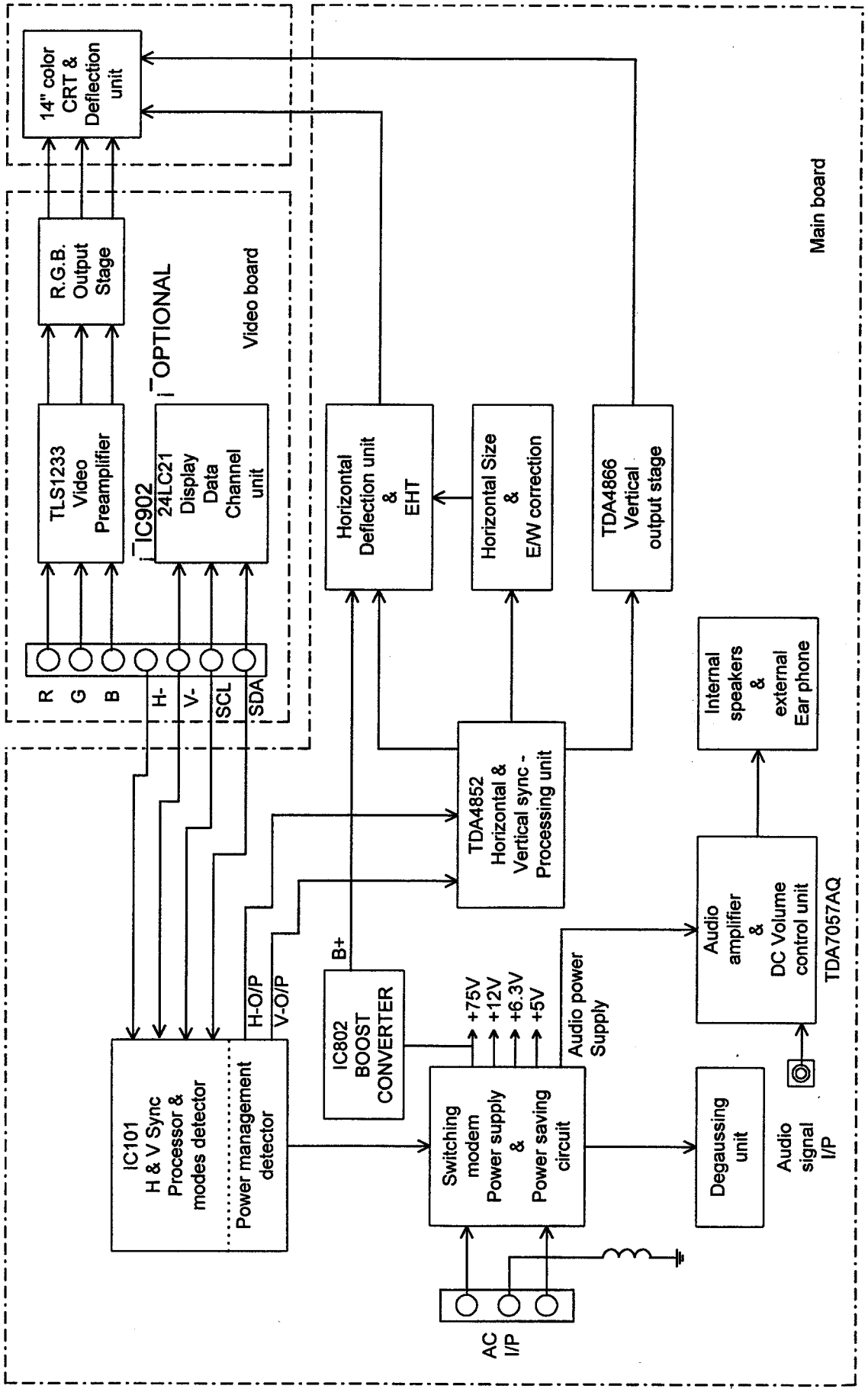
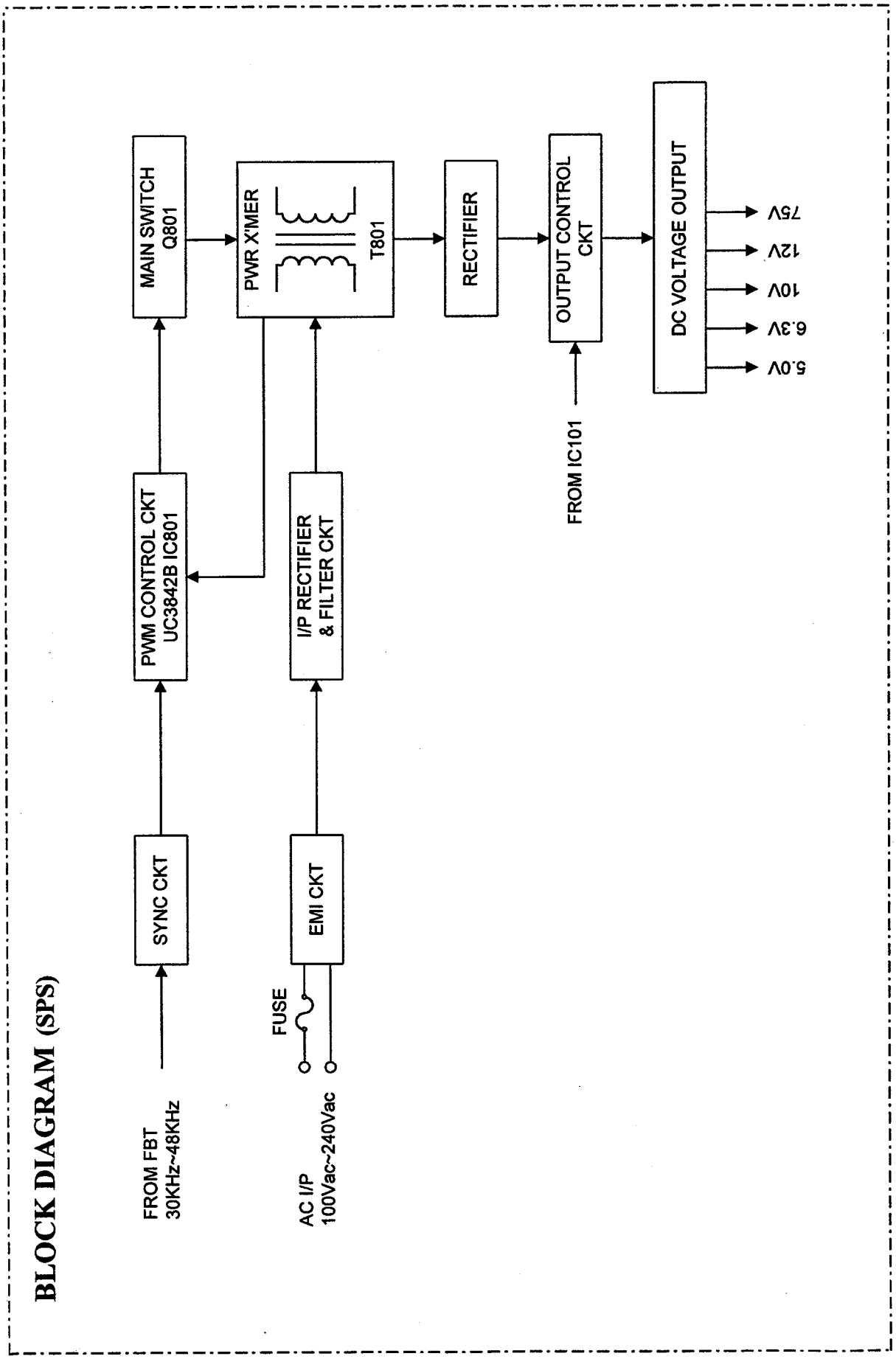
# 5. BLOCK DIAGRAM (MAIN & VIDEO BOARD)



# BLOCK DIAGRAM (SPS)

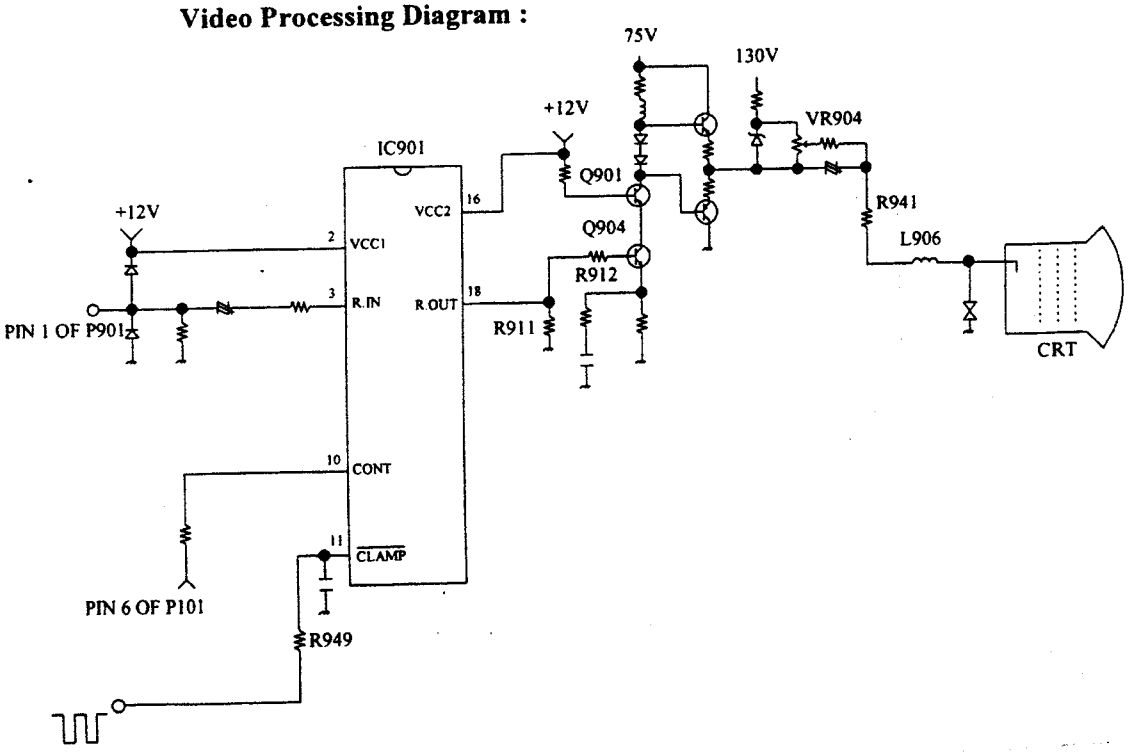


# 6.ELECTRONIC CIRCUIT DESCRIPTION

## 6-1. VIDEO PROCESSING

1. The diagram shows only R channel
2. The R.G.B video input signal is applied to pin3 of IC901 and amplified by the preamplifier (IC 901) and output stages.
3. The output amplifier is a cascode amplifier and is formed by the transistor Q901 and Q904, output signal goes through a pull-push to drive CRT.
4. The DC level of the output can be adjusted by varying the value of VR904 and the cut-off adjustments can be executed.
5. The clamping pulse on pin11 of IC901 is derived from the negative H-sync output (pin33) of IC101(WT6014) via R949, which holds the DC bias of the video amplifiers and CRT cathodes constant during the black level reference portion of the video waveform.
6. The contrast control (pin10 of IC901) is a dc-operated attenuator which varies the ac gain of all three amplifiers simultaneously.

**Video Processing Diagram :**



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## 6-2. MICRO PROCESSOR AND POWER SAVING DETECTOR

1. IC101 is used for discriminating sync signal and detecting power saving mode.
2. Two separated H & V sync. signal with positive or negative polarity is directly applied to pin39 and pin40 of IC101, it will be transferred to fixed negative polarity outputs ( Pin 32 and Pin 33 of IC101 ) on both horizontal and vertical sync. signals.
3. Pin 17 to Pin 18 of IC101 are horizontal frequency discriminator pins. It can be used for phase, size, pincushion compensation and Cs capacitor control. The logical truth table is shown below.

| Pin<br>H-sync | Pin 18 | Pin 17 |
|---|---|---|
| Hs < 36.5K | 0 | 0 |
| 36.5K < Hs < 40K | 0 | 1 |
| 40K < Hs < 50K | 1 | 0 |
| Hs > 50K | 1 | 1 |

4. The tolerance for H-sync frequency discrimination is ± 0.1 KHz.
5. There are 8 PWM O/P'S of IC101, six for user control external. Two for Hor. osc and H-size compensation internal.
6. The volume control is optional for audio amplifier when ping is pull low, this function is disabled.
7. Pin 10 is in low level O/P if sync signals were not present when PWR ON, it is high level output normally. This function is used to get a lighter background in factory burn-in and will display a "No Input Signal" message.

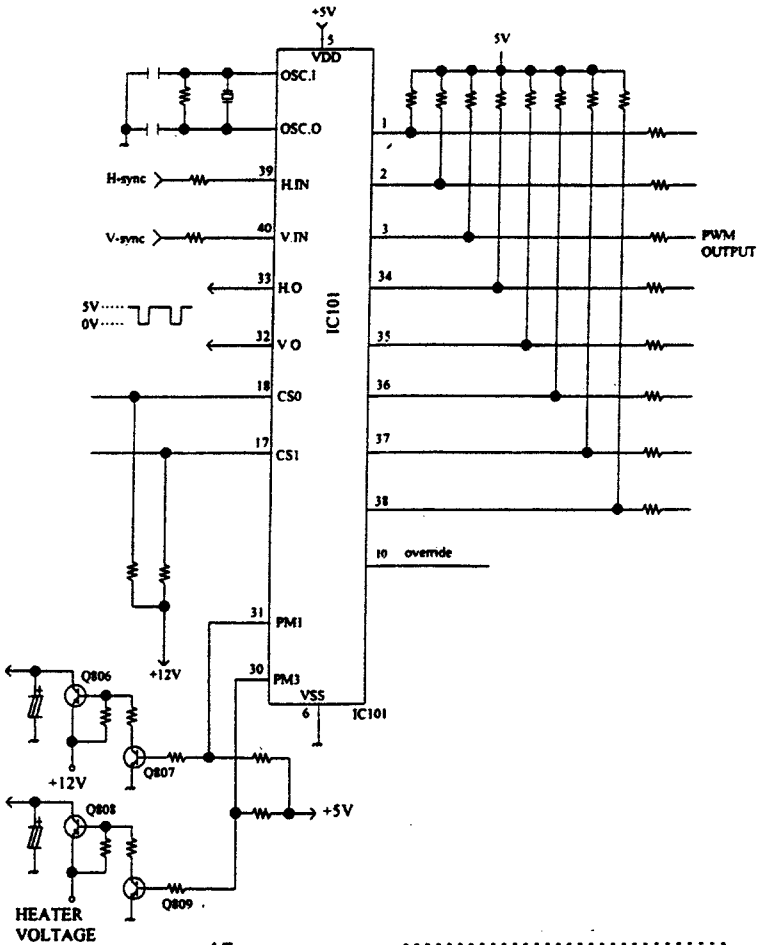
8 . The truth table of power saving detector:

| Mode | H-sync | V-sync | Pin 30 of IC101 ( PM1 ) | Pin 31 of IC101 ( PM3 ) | Q807 | Q809 |
|---|---|---|---|---|---|---|
| ON | Pulses | Pulses | 1 | 1 | ON | ON |
| Stand by | No Pulse | Pulses | 0 | 1 | OFF | ON |
| Suspend | Pulses | No Pulse | 0 | 1 | ON | OFF |
| Off | No Pulse | Pulses | 0 | 0 | OFF | OFF |
| Override | No Pulse | No pulse | 1 | 1 | ON | ON |
| | Manually power on | | | | | |

* "No Pulse" represents the frequency of Hsync or V-sync is less than or equal to 10HZ.

* "Pulses" represents the frequency of H-sync is greater than or equal to 29KHz and lower than 50KHz and V-sync is greater than or equal to 40Hz and lower than 110Hz.

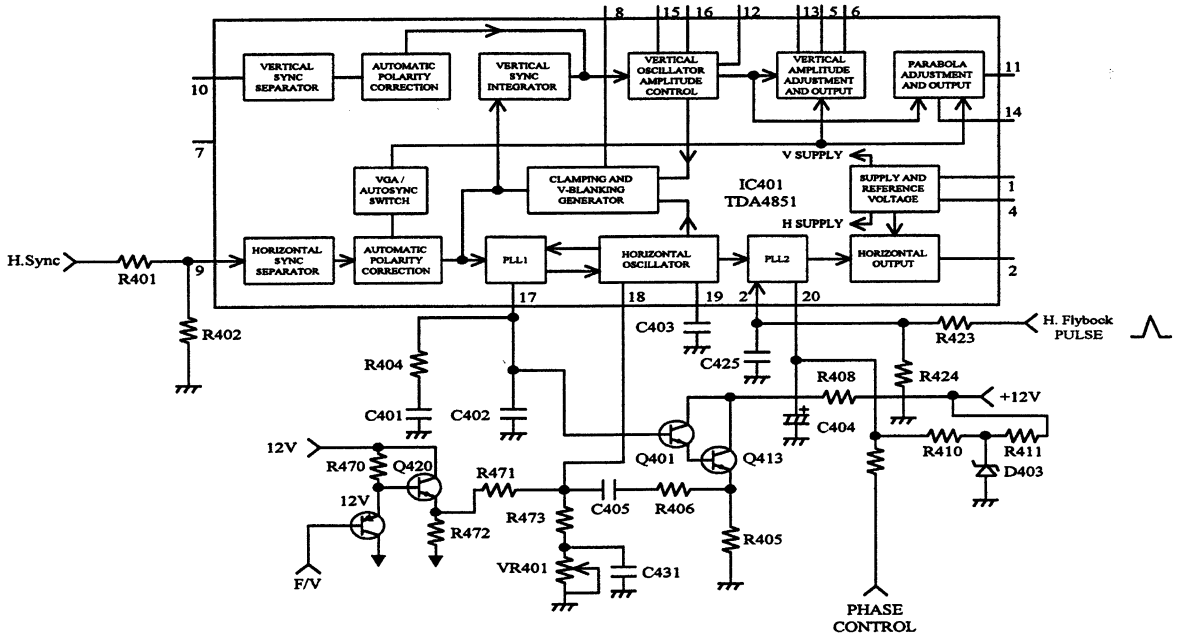
**Synchronous Signal Discriminator and Power Saving Detector**



## 6-3. HORIZONTAL OSCILLATOR & PHASE CONTROL

1. The internal oscillator is controlled by the PLL 1 circuitry. The PLL 1 circuitry receives the horizontal sync. signal as reference.
2. The free running frequency of horizontal oscillator can be externally controlled by current drawn from Pin 18, via VR401 R473R471.
3. With VR401 the free running frequency can be adjusted . in VGA mode. The F/V voltage via Q420Q421 as buffer applied to PIN 18 of IC401 for oscillator when mode change.
4. Network R404C401C402Q401Q413C405 and R406 determines the PLL speed and catching behaviour.
5. Horizontal phase adjustment is realized by changing the phase between the horizontal flyback pulse ( pin 2 of IC401 ) and incoming horizontal sync. ( Pin 9 of IC401 )
6. Phase can be externally controlled with the PLL 2 circuitry by drawn the current out or into pin 20 of IC401.

**Horizontal Oscillator and Phase Control**



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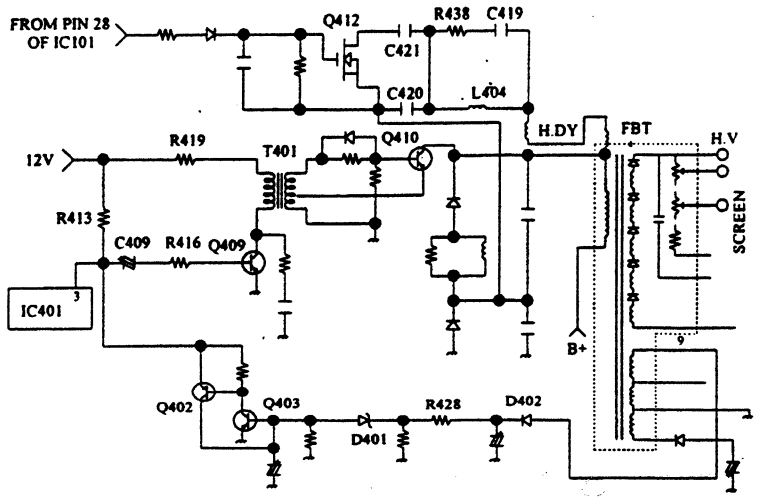
## 6-4. HORIZONTAL DEFLECTION AND PROTECTION CIRCUIT

1. The horizontal drive pulse which comes from Pin 32 of IC401 directly switches off and on transistor Q409.
2. When Q409 is conducting , a current will flow in the primary winding of T401 storing energy in the transformer, when Q409 is cut-off, the transformer energy will supply the base current for the output driver Q410.
3. When Q410 is cut-off, a flyback pulse is produced at the collector of Q410, this pulse is transferred and rectified by the FBT to obtain a high voltage for anode of CRT.
4. The horizontal output pulse at Pin 3 of IC401 is amplified by Q409 and coupled by T401 to the horizontal output transistor Q410 for on-off control, thus sawtooth wave form current through the horizontal deflection yoke is obtained.
5. The function of L404 ( linearity coil ) is to correct the asymmetrical non-linearity of picture.
6. The function of C420 and C421 ( S-correction capacitor ) is to correct symmetrical non-linear distortion of equidistant lines. when the horizontal frequency is between 31.5KHz and 38 KHz, C420 and C421 are in parallel. If horizontal frequency is larger than 40KHz, only C420 is in action.
7. Protection circuit
   A. During normal operation, the pulse voltage at Pin 9 of FBT is about 53 Vpp.
   B. The high voltage for anode of CRT increases, the voltage at Pin 9 of FBT also increases. when this voltage abnormally increases and switches on D401,Q403 and Q402 ( Via D402 and R428 ), it will shorten the horizontal output pulse at Pin 3 of IC401 to GND. At this time Q409 is cut-off, it will stop the horizontal deflection action and protection function is active.

**Horizontal Deflection and Protection Circuit**



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## 6-5. VERTICAL DRIVE AND VERTICAL SIZE CONTROL

I. The negative vertical sync. which comes from Pin 32 of IC101 is applied to Pin 10 of IC401 which accepts only TTL level vertical sync pulse .

II. Vertical oscillation

A. The vertical free running frequency is determined by R231 and C202 which is connected to Pin15 and Pin 16 of IC401.

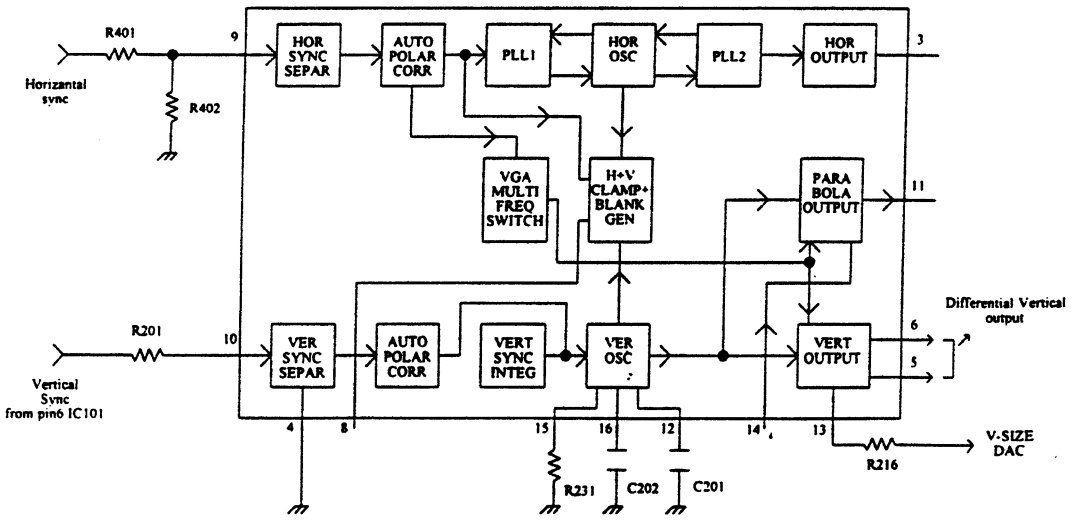
B. The vertical sync. pulse, derived from the sync input ( Pin 10 of IC401), directly synchronizes the vertical oscillator.

III. V-size control

A. With a DC Current flow in Pin 13 of IC401, the amplitude of differential output currents can be set.

B. Vertical size are DC current controlled, it can be varied by micro processer DAC O/P.

**Vertical Drive and Vertical Size Control**



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## 6-6. VERTICAL OUTPUT, BLANKING AND SHIFT CONTROL

I. The differential current outputs ( Pin 5 and Pin 6 ) of IC401 ( TDA4852 ) are connected to the " + " and " – " inputs ( Pin 1 and Pin2 ) of IC201 ( TDA4866 ).

II. The output stage IC201 ( TDA 4866 ) is in principle a high gain operational amplifier with a buffer stage to supply the deflection current.

III. By varying resistor R206 and R207, one can set the desired deflection current. This can be calculated with:

I defl = Iin ( diff ) X ( R206/R207).

I defl: the deflection current flowing through the vertical deflection yoke.

Iin ( diff ) : the differential input current . Derived from Pin 5 and Pin 6 of IC401.

IV. Vertical shift control

The vertical shift control is used to center the picture vertically and it can be achieved by supplying extra current to Pin 2 of IC201.

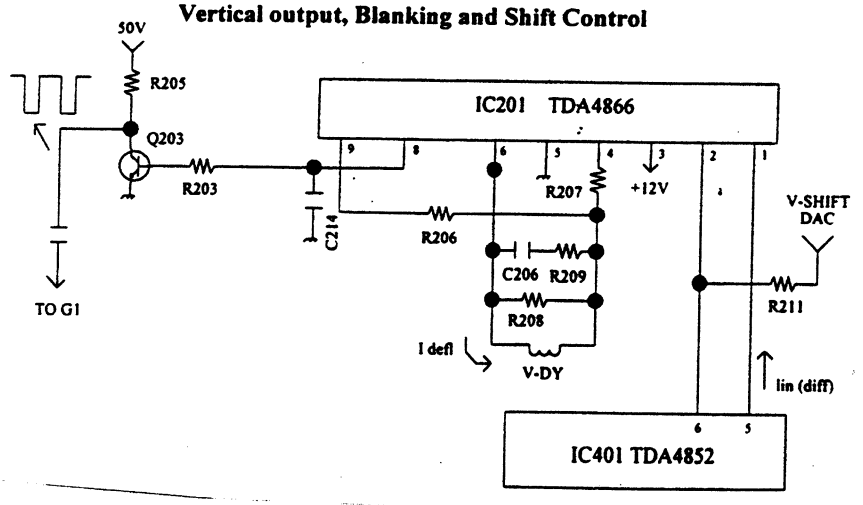
V. Vertical blanking circuit

A. During vertical retrace, the electron beam will sweep from the bottom to the top of the screen. The horizontal scan continues during vertical retrace. Zigzag lines will be visible on the screen. Vertical blanking circuitry is used for suppressing these lines non visible on the screen during vertical retrace.

B. The vertical blanking pulse is obtained from Pin 8 of IC201, which is positive pulse.

C. The negative pulse will appear at the collector of Q203. It is applied to G1 via C210. At this time CRT is cut off and no retrace lines are visible.

**Vertical output, Blanking and Shift Control**



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## 6-7. E/W CORRECTION, HORIZONTAL SIZE AND HORIZONTAL DC SHIFT

I. E/W Correction

A. Parabolic waveform from P11 of IC401 is amplified by IC402 and AC coupled to H-size control circuit.

B. The Amplitude of parabolic waveform from P11 of IC401 can be adjusted by controlling the output current of P13 via DAC vaule.

C. The output current of Pin13 of IC401 increases, the amplitude of parabolic waveform also increases.

II. H-size control

A. The voltage across C412 can be reduced by drawing a current via Q408 and Q407, which can be controlled by conducting Q417.

B. To increase conducting Q417 to decrease the base voltage of Q407, it will increase the current drawing by Q408 and increase the H-size. Oppositely it will decrease the H-size.

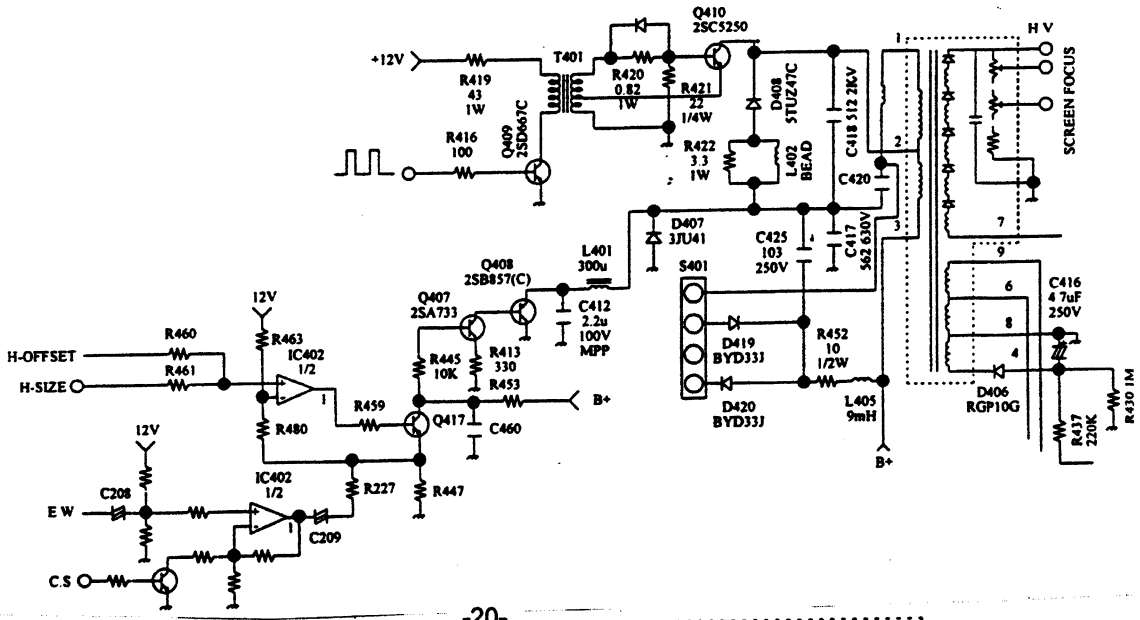
III. Horizontal DC shift

A. The raster can be centred horizontally with the horizontal DC shift.

B. The DC shift circuitry is capable of sending a small adjustable DC current through the deflection coil in either direction.

C. When S401 is switched to Pin 4, a small current will flow into the deflection coil via L405,R452,D420 and L404, the raster will shift right. Oppositely when S401 is switched to Pin2, the raster will shift left.

**E/W Correction, Horizontal Size and Horizontal DC Shift**



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## 6-8. CONSTAST AND BRIGHTNESS CONTROL

I. With the contrast control VR405 the gain of R,G and B signals on the CRT cathode can be varied simultaneously.

II. The sub-contrast control VR406 is necessary to limit the maximum contrast level.

III. ABL ( Automatic Beam current Limiter )

A. Without ABL the average beam current for full white patterns would exceed the maximum limit of beam current, thereby shortening life time of CRT and worsening screen performance due to local doming.

B. Beam current can be detected by measuring the current in the lower end of the FBT EHT winding.

C. When beam current flows into FBT, the voltage across C423 drops and the voltage at the emitter of Q411 will also drop.

D. The voltage on pin 10 of IC901 also drops, this will decrease the R,G and B output ( pin13,15 and pin18 ) of IC901.

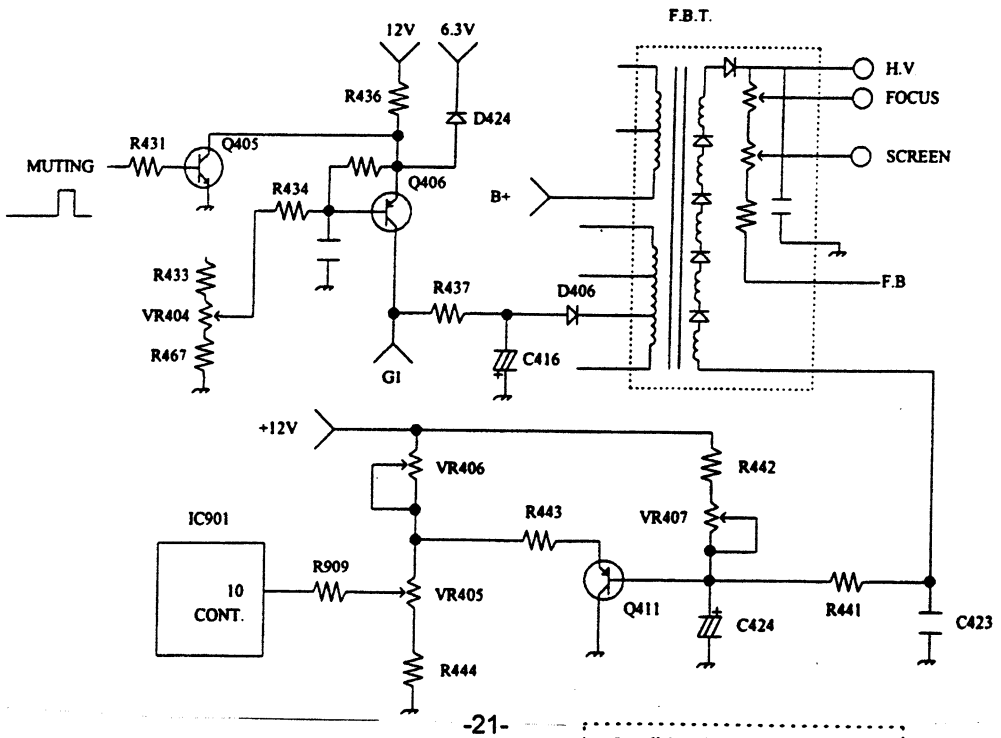
E. The ABL starting point can be adjusted with VR407.

IV. Brightness control is varied the base voltage of Q406, then the current flow in emitter will change the collecter voltage O/P.

V. Q405 is the mute circuit to blank CRT when mode changed.

VI. D424 is to speed Q406 off when power off to prevent spot light from damaging CRT.

**Contrast and ABL Control Diagram :**



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## 6-9. SWITCHING POWER SUPPLY CIRCUIT

I. Primary side

A. Start up circuit

1. When the monitor is switched on, the DC voltage across C808 will charge C811 via R804 and R805 until the Vcc threshold ( voltage on Pin 7 of IC801 ) is reached.
2. IC801 start driving the MOSFET switch Q801 and the SMPS will start up, the voltage for IC801 ( Pin 8 ) is maintained by rectifying the AC voltage across winding 3,7 of T801 by D810,R810.

B. Voltage feedback

1. The primary sense voltage across C814 is obtained by rectifying the AC voltage on Pin3 of T801 by D811.
2. The sense voltage is applied to the error amplifier ( Pin 2 of IC801) via R818.
3. With VR801 the desired secondary voltage is adjusted.

C. Current feedback

1. The current in the source of Q801 will produce a voltage drop across R812. This voltage is compared with the error voltage and determines the on time of Q801.
2. R813 and C819 are a filter network that removes spikes on the control voltage.

D. Driving MOSFET switch Q801

1. The output Pin 6 of IC801 is a special designed to drive power MOSFET directly.
2. D807 and R861 are for quick discharge of the gate capacitance from on to turn off the switch.

E. Oscillator and synchronization

1. The oscillator in IC801 is synchronized on the horizontal flyback frequency. The trigger pulse is derived via a loop winding around the core of FBT.
2. Synchronizing is obtained by add a small flyback pulse to Pin 4 of IC801 via C818, R821, D814 and C817.
3. The free running frequency will produce when the trigger pulse is



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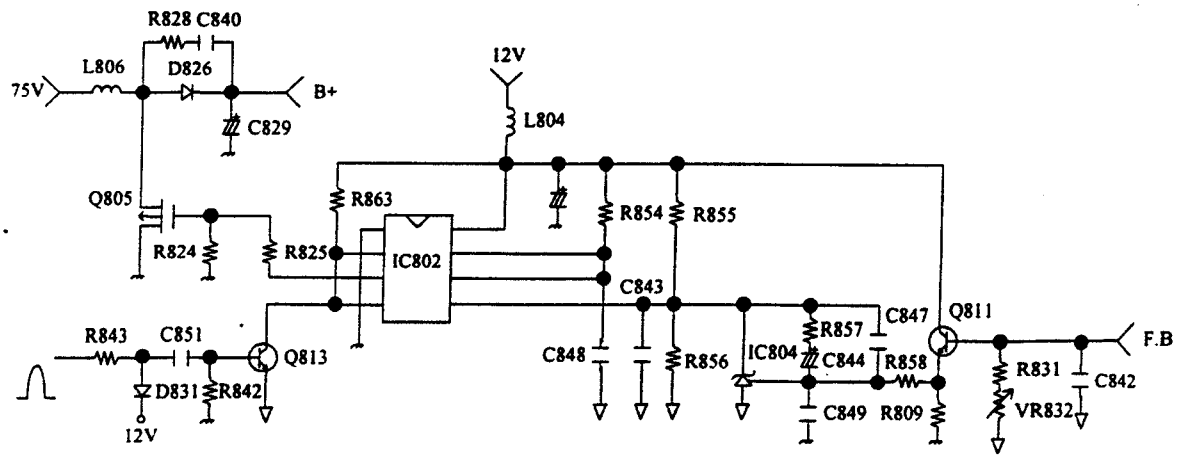
not applied, which is determined by R823 and C816.

II. Secondary Side

A. B+ booster converter

1. IC802 is a timer used for PWM oscillator.
2. Flyback pulse via R843C851Q813 triggered the timer, then 12V charged C843 via R854, and Pin3 has a high level O/P.
3. The voltage across on C843 reaches the thresh-hold at Pin5, C843 start to discharge via internal CKT of IC802 and Pin3 has a low level O/P.
4. The output pulse at Pin3 is used to control Q805 for energy stored in L806.
5. When Q805 is off, The energy stored in L806 is boostered upon VCC input, via D826/C829 to rectify DC voltage for deflection use.
6. The feedback voltage from H.V is derived from R831VR832, Q811 is used as impedance buffer for error amplifier.
7. IC804 is the error amplifier, the output of cathode was shuntted to threshhold control Pin5 for PWM duty control.

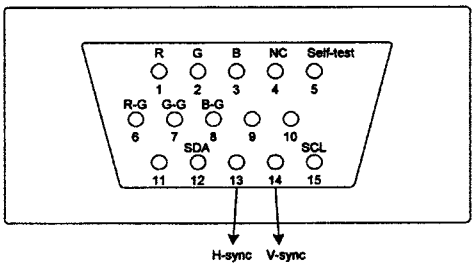



B. Power management

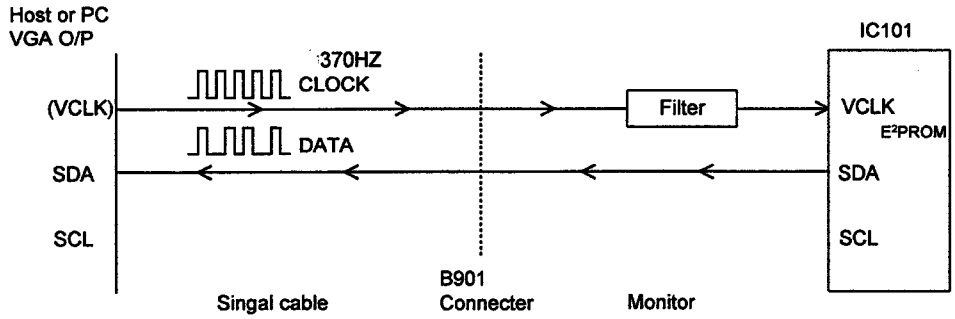
1. During normal operation, the base voltage of Q807 and Q809 is High, Q806 and Q808 are conducting. The color of LED is green.
2. In standby mode or suspend mode Q808 is still conducting, but Q806 is notconducting. At this time the base voltage of Q807 isLowand the color of LED is orange.
3. In off mode Q806 and Q808 are not conducting, the base voltage of Q807 and Q809 is Low. The color of LED is orange.

## 6-10. DDC FUNCTION (DISPLAY DATA CHANNEL)

1. Software DDC is supported.
2. JD144 Support.DDC1/2B to meet VESA standard.
3. DDC define a communication channel between a computer display and a host system. The channel can be used to carry information that can be used to configure the host graphics controller for optimal use of the display.
4. DDC1/2BThe display can continuously transmit its extended ID,"EDID",using DDC1.
   The display can also respond to a requests for "EDID". IF a DDC1 capable host is detected by a DDC capable display. the display will switch to DDC2, there is no means to switch from DDC2 to DDC1 unless the power is removed.
5. Signal cable D-sub pin definition for DDC




6. When monitor works in DDC1 mode, V-sync as a clock will increase its frequency for DATA transmitting.



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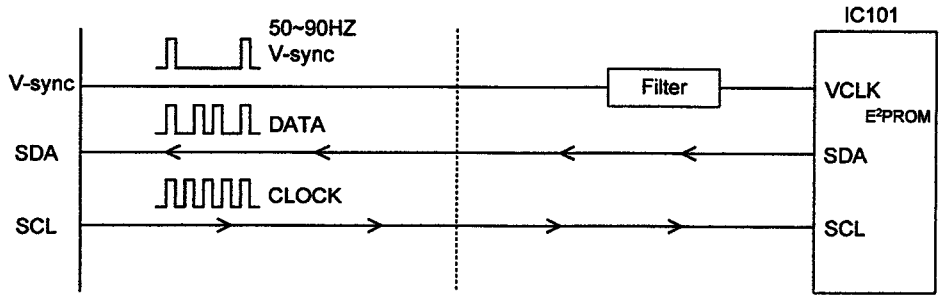
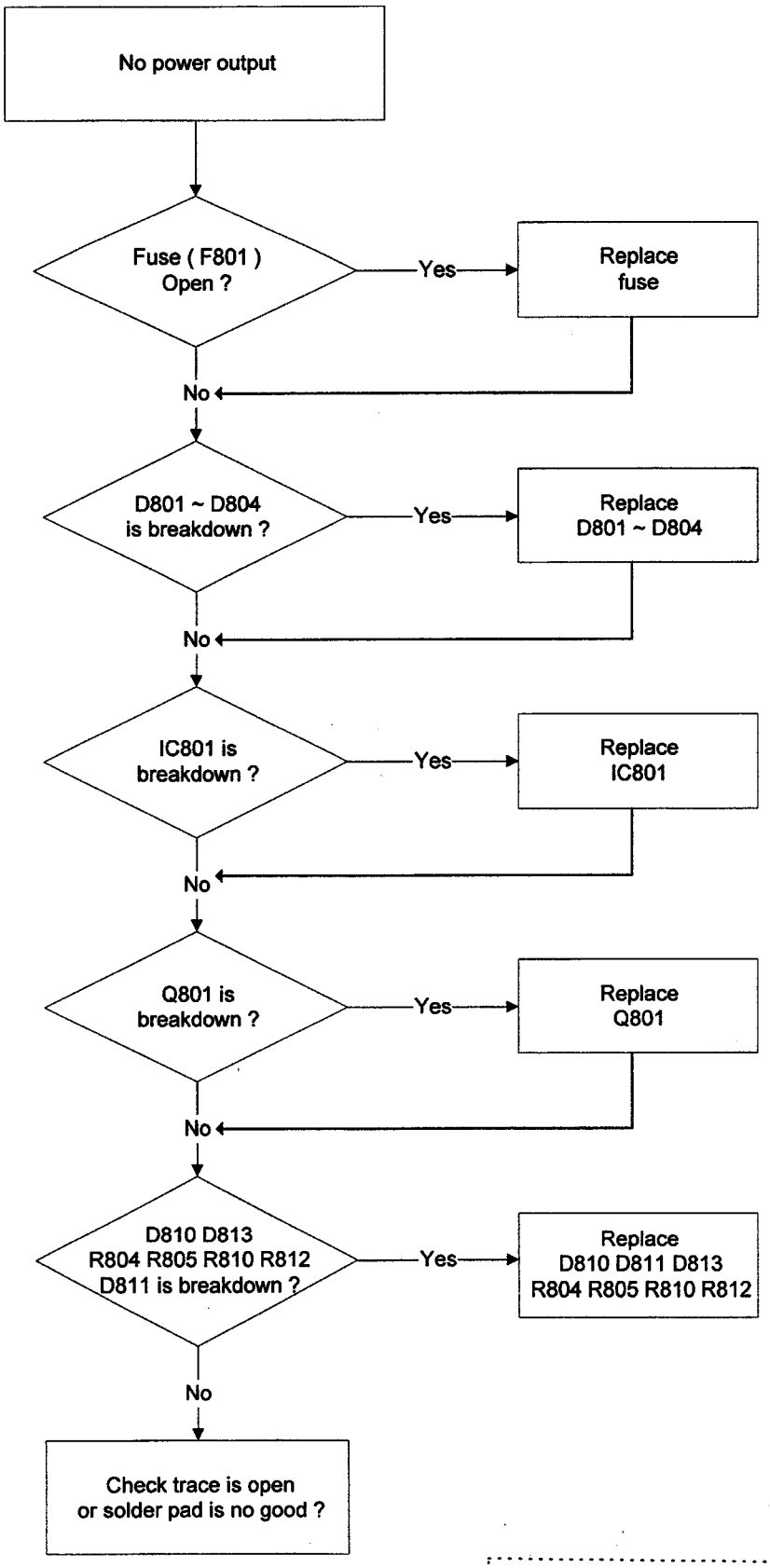
7. When monitor works in DDC2.



# 7. TROUBLE SHOOTING FLOW CHART:

## 7-1. NO POWER OUTPUT



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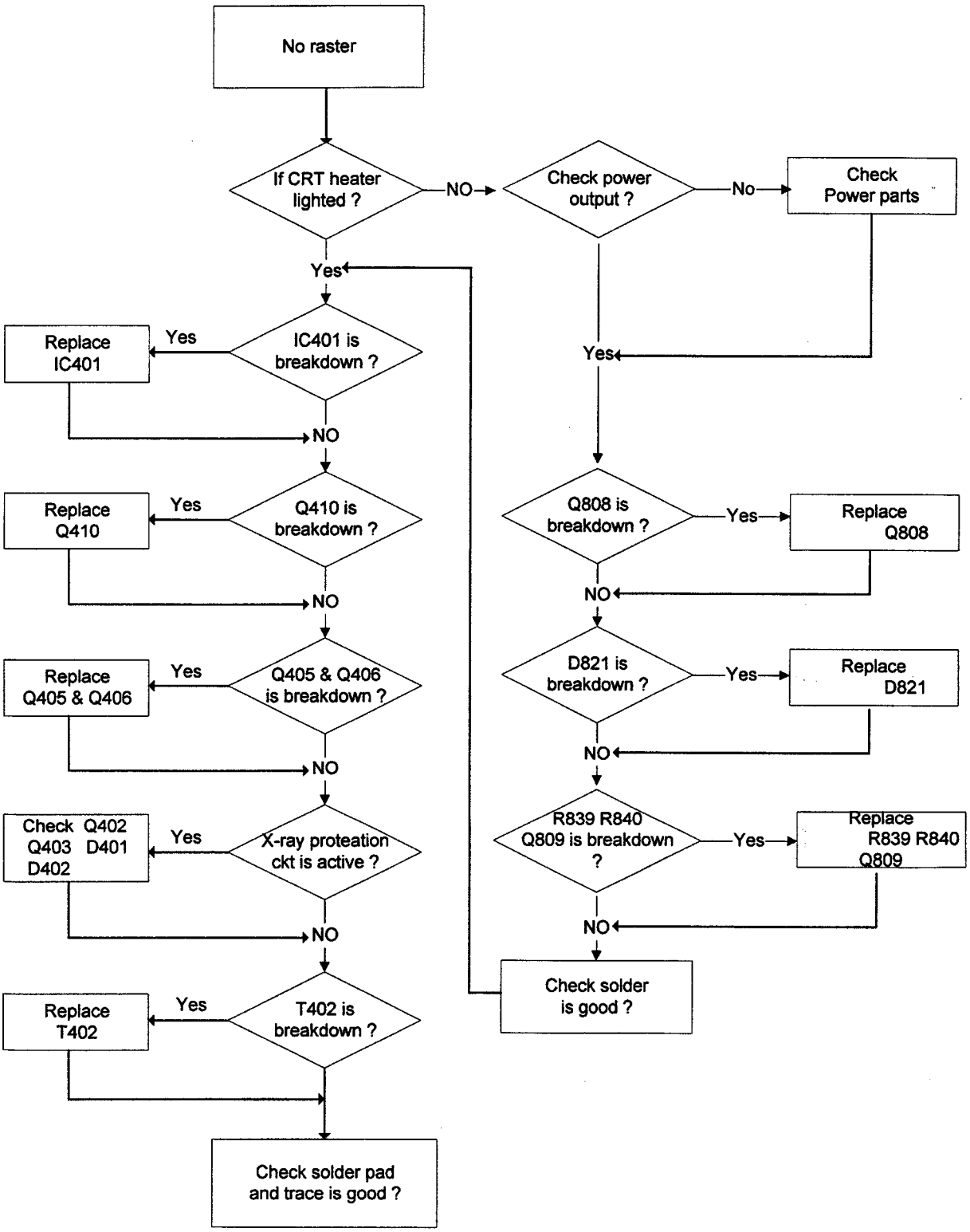
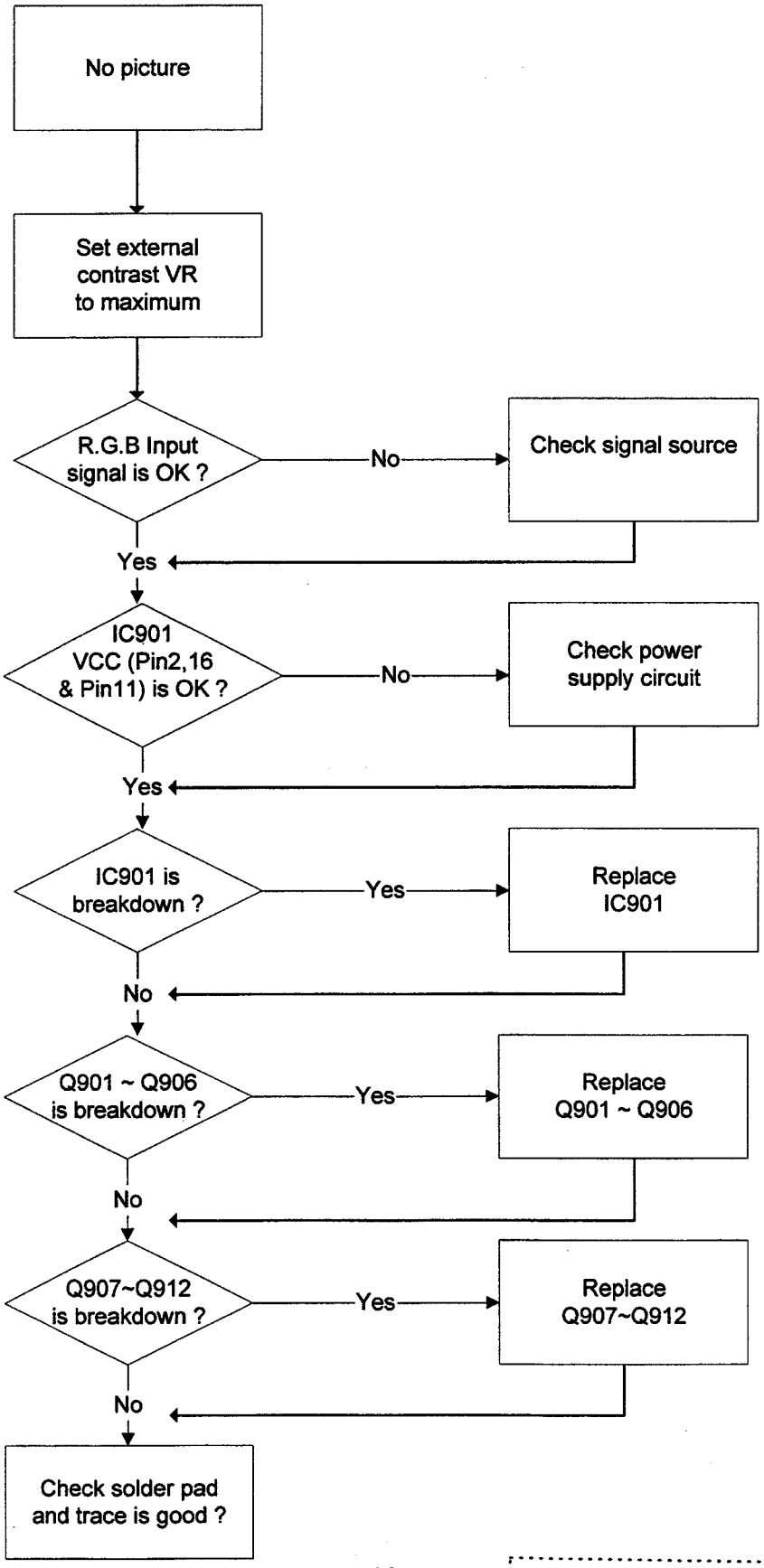
## 7-2. NO RASTER


No raster
If CRT heater lighted ?
NO
Check power output ?
No
Check Power parts
Yes
Yes
Replace IC401
IC401 is breakdown ?
NO
Replace Q410
Q410 is breakdown ?
NO
Replace Q405 & Q406
Q405 & Q406 is breakdown ?
NO
Check Q402 Q403 D401 D402
X-ray proteation ckt is active ?
NO
Replace T402
T402 is breakdown ?
Check solder pad and trace is good ?
Q808 is breakdown ?
Yes
Replace Q808
NO
D821 is breakdown ?
Yes
Replace D821
NO
R839 R840 Q809 is breakdown ?
Yes
Replace R839 R840 Q809
NO
Check solder is good ?

## 7-3. NO PICTURE



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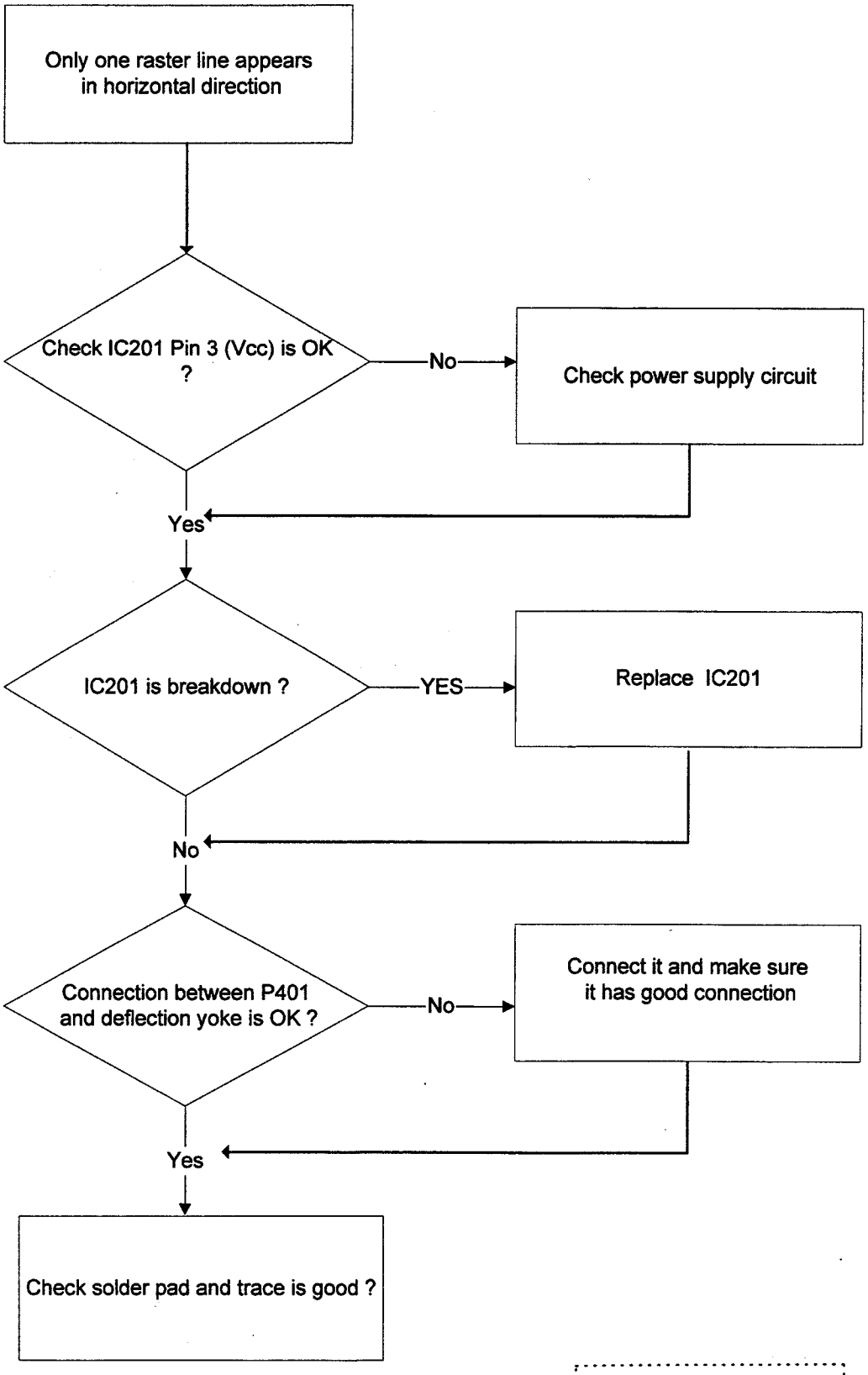
## 7-4. ONLY ONE RASTER LINE APPEARS IN HORIZONTAL DIRECTION


Only one raster line appears in horizontal direction
Check IC201 Pin 3 (Vcc) is OK ?
No
Check power supply circuit
Yes
IC201 is breakdown ?
YES
Replace IC201
No
Connection between P401 and deflection yoke is OK ?
No
Connect it and make sure it has good connection
Yes
Check solder pad and trace is good ?



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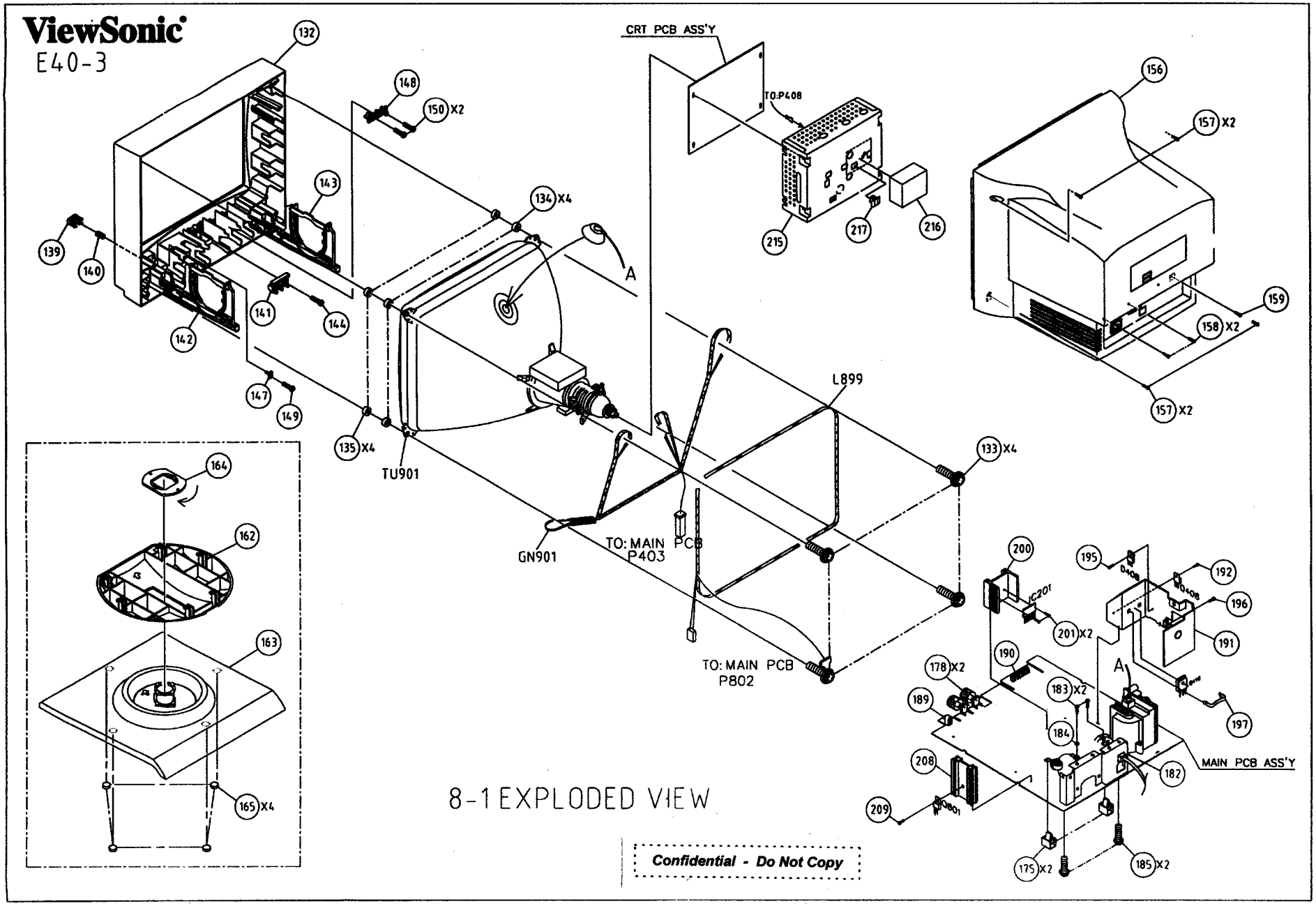
ViewSonic
E40-3
CRT PCB ASS'Y
TO:P408
TU901
GN901
L899
TO: MAIN PCB
P403
TO: MAIN PCB
P802
MAIN PCB ASS'Y
8-1 EXPLODED VIEW
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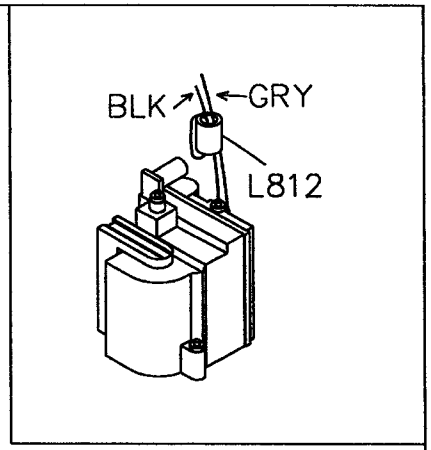
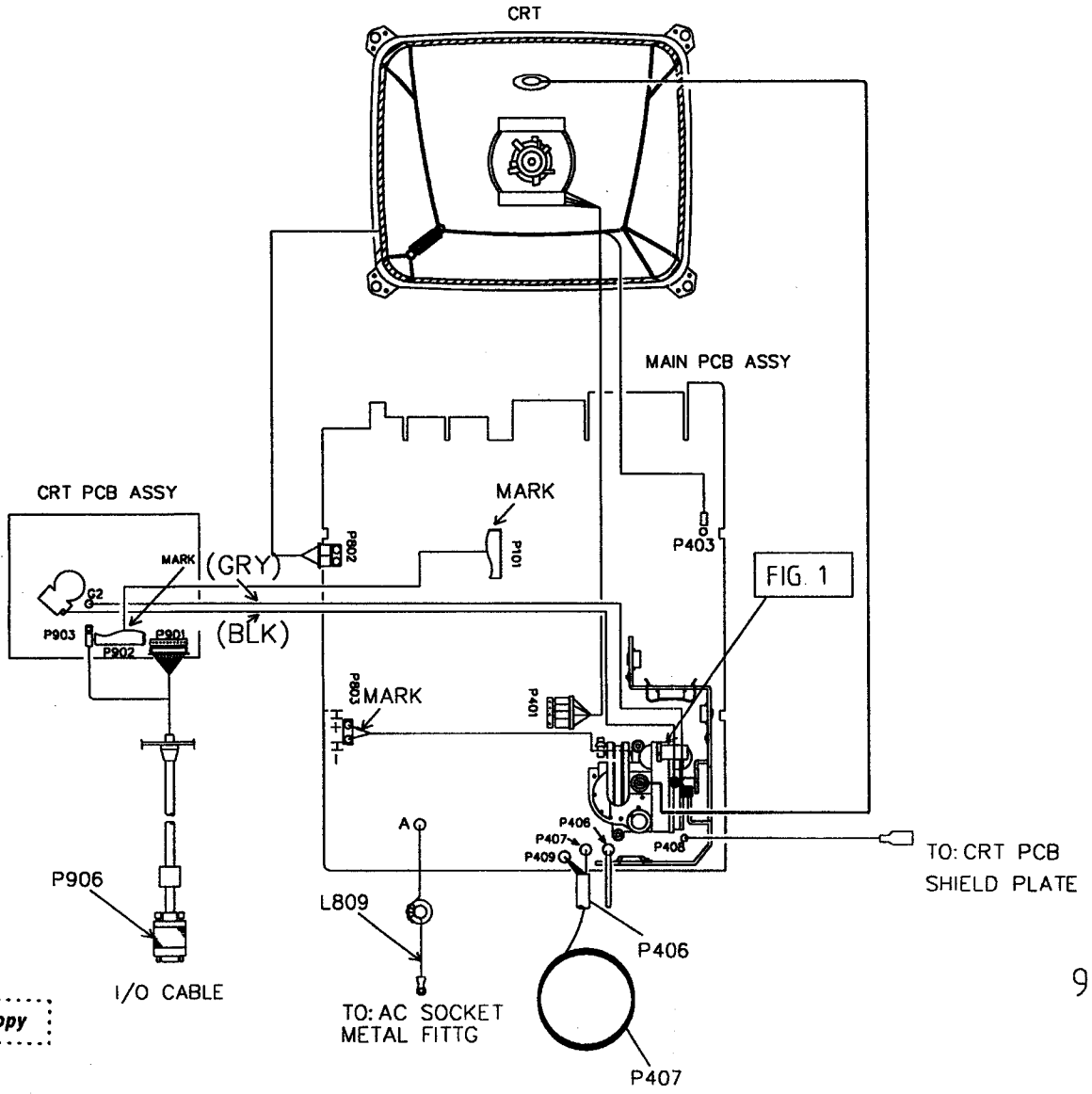
## 8-2 EXPLODED PARTS LIST

| Ref. No. | Source | Part No. | DESCRIPTION | SPEC. | Q'TY | REMARK |
|---|---|---|---|---|---|---|
| 132 | | 2024252201 | PANEL | ABS 94V-0 | 1 | |
| 133 | | 2080200400 | SCREW,SPE T+ | (SPE T+) SWCH 18A MFZN-C | 4 | |
| 134 | | 2061402902 | BUSHING | CVM4967 SBR | 4 | |
| 135 | | 2090105041 | WASHER,METAL | 20X5.5D 2.0T | 4 | |
| 139 | | 2046251501 | PUSH BUTTON | ABS 94HB G7258 | 1 | |
| 140 | | 2105150200 | SPRING | 0.5 | 1 | |
| 141 | | 2044251601 | KNOB | ABS 94HB G7258 | 1 | |
| 142 | | 2074151000 | HOLDER | ABS 94HB | 1 | |
| 143 | | 2074151100 | HOLDER | ABS 94HB | 1 | |
| 144 | | 2084730102 | SCREW,BND T+ | M3X10(BND T+) | 1 | |
| 147 | | 2053252300 | INDICATOR | PMMA | 1 | |
| 148 | | 2053252400 | INDICATOR | PMMA | 1 | |
| 149 | | 2084730102 | SCREW,BND T+ | M3X10(BND T+) | 1 | |
| 150 | | 2084730102 | SCREW,BND T+ | M3X10(BND T+) | 2 | |
| 156 | | 2022251801 | CABI BACK | JD144V ABS 94V-0/G7258 | 1 | |
| 157 | | 2084740202 | SCREW,BND T+ | M4X20(BND T+) | 4 | |
| 158 | | 2084730102 | SCREW,BND T+ | M3X10(BND T+) | 2 | |
| 159 | | 2084730102 | SCREW,BND T+ | M3X10(BND T+) | 1 | |
| 162 | | 2028250101 | STAND | SWIVEL HIPS | 1 | |
| 163 | AA | 2028250201 | STAND | HIPS | 1 | |
| 163 | BA | 2028250401 | STAND | HIPS 94HB | 1 | |
| 164 | AB | 2074150500 | HOLDER | JD156G DURACON | 1 | |
| 164 | BB | 2074107000 | HOLDER | JK1472 DURACON M90 | 1 | |
| 165 | | 2039801701 | LEG | JD144B SBR 11.8X5t BLACK | 4 | |
| 175 | | 2074150700 | HOLDER | NYLON 66 | 2 | |
| 178 | | 2043250301 | ROTARY KNOB | ABS 94-V0 | 2 | |
| 182 | RA | 2071950300 | METAL FITTG | SECC T=1.2 | 1 | |
| 182 | RB | 2071950900 | METAL FITTG | SECC T=1.0 | 1 | |
| 183 | | 2082640102 | SCREW | M4X10 P=0.7 | 2 | |
| 184 | | 2092440200 | WASHER,OT | D1=4.3 D2=8.5 T=0.45 | 1 | |
| 185 | | 2084730102 | SCREW,BND T+ | M3X10(BND T+) | 2 | |
| 189 | | 2074150900 | HOLDER | NYLON 66 | 1 | |
| 190 | | 2074152000 | HOLDER | NYLON 66 | 1 | |
| 191 | RA | 2072250900 | HEAT SINK | ALUMINIUM A1100P | 1 | |
| 191 | RB | 2072251400 | HEAT SINK | ALUMINIUM A1100P | 1 | |
| 192 | | 2084730082 | SCREW,BND T+ | M3X8(BND T+) | 1 | |
| 195 | | 2084730082 | SCREW,BND T+ | M3X8(BND T+) | 1 | |
| 196 | | 2080250100 | SCREW,SPE T+ | BT3.5-20 KEY/IN | 1 | |
| 197 | | 2105250100 | SPRING PLATE | SUS301 0.35t | 1 | |
| 200 | | 2072250800 | HEAT SINK | ALUMINIUM A6063S-T5 | 1 | |
| 201 | | 2084730102 | SCREW,BND T+ | M3X10(BND T+) | 2 | |
| 208 | | 2072209700 | HEAT SINK | JK1565F | 1 | |
| 209 | | 2084730102 | SCREW,BND T+ | M3X10(BND T+) | 1 | |
| 215 | RA | 2071650500 | SHIELD PLATE | SPTE T=0.3 | 1 | |
| 215 | RB | 2071650700 | SHIELD PLATE | SPTE T=0.3 | 1 | |
| 216 | | 2061250300 | SPONGE | JD145K 50X80X35t Pu FOAM94HF- | 1 | |
| 217 | | 2074152600 | HOLDER | PC 94V0 | 1 | |

**ViewSonic**
E40-3




9. WIRING DIAGRAM

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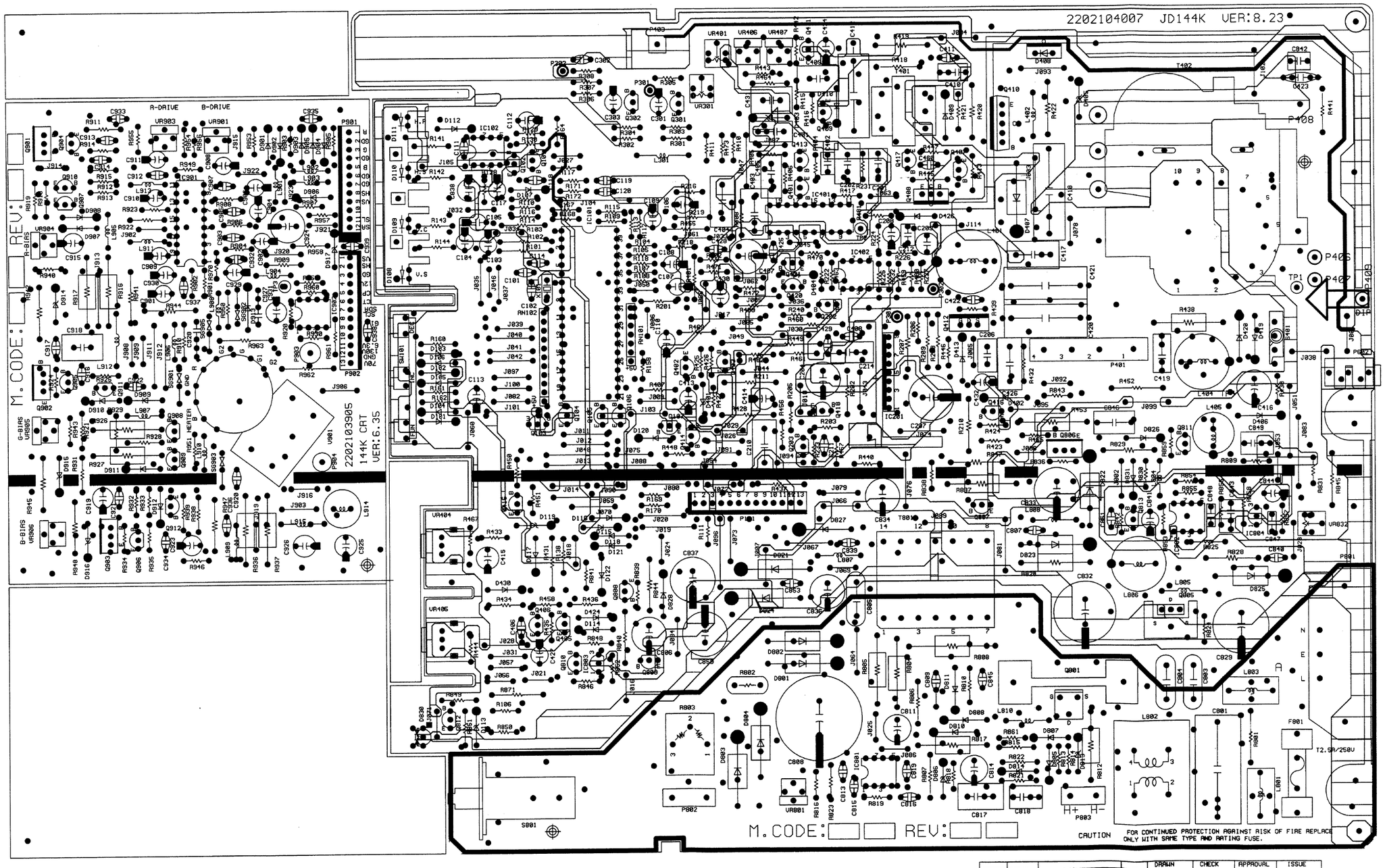
# 11. ELECTRICAL PARTS LIST

When you place a parts order, be sure to indicate the following data on the order:

- Location No.
- Parts No.
- Description

## CRT P.C.BOARD

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | | | REMARK |
|---|---|---|---|---|---|---|---|
| C901 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C902 | | 2333610591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 50V | M |
| C903 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C904 | | 2333610591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 50V | M |
| C905 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C906 | | 2333610591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 50V | M |
| C907 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C908 | | 2333447691 | CAP,MINI ELE 105'C | CE04W | 47.000UF | 25V | M |
| C909 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C910 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C911 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C912 | | 2281156191 | CAP,CER | CK45B | 560.000PF | 50V | K |
| C913 | | 2281133191 | CAP,CER | CK45B | 330.000PF | 50V | K |
| C914 | | 2272151091 | CAP,CER | CC45CH | 51.000PF | 50V | J |
| C915 | | 2333910591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 160V | M |
| C916 | | 2272162091 | CAP,CER | CC45CH | 62.000PF | 50V | J |
| C917 | | 2281133191 | CAP,CER | CK45B | 330.000PF | 50V | K |
| C918 | | 2291510491 | CAP,MYL | CQ92M | 0.100UF | 100V | K |
| C919 | | 2333910591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 160V | M |
| C921 | | 2281133191 | CAP,CER | CK45B | 330.000PF | 50V | K |
| C922 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C923 | | 2333910591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 160V | M |
| C925 | | 2333810691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 100V | M |
| C926 | | 2333910591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 160V | M |
| C927 | | 2283110291 | CAP,CER | CK45B | 1000.000PF | 500V | K |
| C928 | RA | 2285210291 | CAP,CER | CK45B | 1000.000PF | 2KV | K |
| C928 | RB | 2285610291 | CAP,CER | CK45E | 1000.000PF | 2KV | Z |
| C929 | | 2333447691 | CAP,MINI ELE 105'C | CE04W | 47.000UF | 25V | M |
| C930 | | 2333447691 | CAP,MINI ELE 105'C | CE04W | 47.000UF | 25V | M |
| C932 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C933 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C934 | | 2272156091 | CAP,CER | CC45CH | 56.000PF | 50V | J |
| C935 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C937 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C938 | | 2272147091 | CAP,CER | CC45CH | 47.000PF | 50V | J |
| C939 | | 2272147091 | CAP,CER | CC45CH | 47.000PF | 50V | J |
| D907 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D909 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D911 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D913 | RA | 2363218495 | DIODE,RECT | BYD33J | | PHILIPS | |
| D913 | RB | 2363207895 | DIODE,RECT | 1N4937 | | FAGOR | |
| D914 | RA | 2363510695 | DIODE,ZENER | HZ33-2 32.2-33.6V 0.5W | | HITACHI | |
| D914 | RB | 2363503295 | DIODE,ZENER | RD33EB3 30.90V-32.50V 0.5W | | | |
| D915 | RA | 2363510695 | DIODE,ZENER | HZ33-2 32.2-33.6V 0.5W | | HITACHI | |
| D915 | RB | 2363503295 | DIODE,ZENER | RD33EB3 30.90V-32.50V 0.5W | | | |
| D916 | RA | 2363510695 | DIODE,ZENER | HZ33-2 32.2-33.6V 0.5W | | HITACHI | |
| D916 | RB | 2363503295 | DIODE,ZENER | RD33EB3 30.90V-32.50V 0.5W | | | |
| IC901 | | 2365318700 | IC,LINEAR | TLS1233N | | TI | |
| L904 | | 2372122095 | COIL,PEAKING | TDK SPT0305SA 22.000UH J | | | |
| L905 | | 2372222995 | COIL,PEAKING | 2.20UH K R<0.25 I 630mA | | | |
| L906 | | 2372233995 | COIL,PEAKING | 3.30UH K R<0.30 I 575mA | | | |
| L907 | | 2372222995 | COIL,PEAKING | 2.20UH K R<0.25 I 630mA | | | |
| L908 | | 2372239995 | COIL,PEAKING | 3.90uH K R<0.32 I<555mA | | | |
| L909 | | 2372268995 | COIL,PEAKING | 6.8uH K R<0.45 I<470mA | | | |
| L910 | | 2372239995 | COIL,PEAKING | 3.90uH K R<0.32 I<555mA | | | |
| L912 | | 2379101495 | FERRITE CORE | 3.5X9X0.8 | | | |
| L914 | | 2371131000 | COIL,CHOKE | JD156G 15UF 21.5T REF | | | |
| L915 | | 2379101495 | FERRITE CORE | 3.5X9X0.8 | | | |
| P901 | | 2404338011 | CONNECTOR | LEOCO 2521 12 PIN P=2.5 | | | |
| P903 | | 2404340000 | CONNECTOR | LEOCO 1086 1PIN P=7.5 | | | |
| Q901 | RA | 2361411300 | XISTOR,NPN A | 2SD2491C | | HITACHI | |
| Q901 | RB | 2361412200 | XISTOR,NPN A | HSD1609-D | | HI-SINCE | |
| Q902 | RA | 2361411300 | XISTOR,NPN A | 2SD2491C | | HITACHI | |
| Q902 | RB | 2361412200 | XISTOR,NPN A | HSD1609-D | | HI-SINCE | |


2202104007 JD144K VER:8.23
A-DRIVE
B-DRIVE
M.CODE: REV:
2202103905 144K CRT VER:6.35
CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE AND RATING FUSE.
T2.5A/250V
SLKSCA TOP
Confidential - Do Not Copy
DRAWN
CHECK
APPROVAL
ISSUE
ViewSonic Corporation
DRAW NAME
PARTS LOCATION AND WIRING
DRAW NO. SBA
PAGE:1
NEXT:X
REV:
E40-3
MARK
DATE
CONTENT OF MODIFY
SIGN

- BLANK PAGE -

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | | REMARK |
|---|---|---|---|---|---|---|
| Q903 | RA | 2361411300 | XISTOR,NPN A | 2SD2491C | | HITACHI |
| Q903 | RB | 2361412200 | XISTOR,NPN A | HSD1609-D | | HI-SINCE |
| Q904 | | 2361302391 | XISTOR,NPN R | 2SC4367 T | | HITACHI |
| Q905 | | 2361302391 | XISTOR,NPN R | 2SC4367 T | | HITACHI |
| Q906 | | 2361302391 | XISTOR,NPN R | 2SC4367 T | | HITACHI |
| Q907 | | 2361400591 | XISTOR,NPN A | 2SD756A(D) | | HITACHI |
| Q908 | | 2361400591 | XISTOR,NPN A | 2SD756A(D) | | HITACHI |
| Q909 | | 2361400591 | XISTOR,NPN A | 2SD756A(D) | | HITACHI |
| Q910 | | 2361200491 | XISTOR,PNP A | 2SB716A(D) | | HITACHI |
| Q911 | | 2361200491 | XISTOR,PNP A | 2SB716A(D) | | HITACHI |
| Q912 | | 2361200491 | XISTOR,PNP A | 2SB716A(D) | | HITACHI |
| R901 | | 2233413395 | RES,CBN 1/4 S | RD 1/4WS | 13.00K J | |
| R902 | | 2233413295 | RES,CBN 1/4 S | RD 1/4WS | 1.30K J | |
| R903 | | 2233475095 | RES,CBN 1/4 S | RD 1/4WS | 75.00 J | |
| R904 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS | 100.00 J | |
| R905 | | 2233475095 | RES,CBN 1/4 S | RD 1/4WS | 75.00 J | |
| R906 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS | 100.00 J | |
| R907 | | 2233475095 | RES,CBN 1/4 S | RD 1/4WS | 75.00 J | |
| R908 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS | 100.00 J | |
| R909 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K J | |
| R910 | | 2233422295 | RES,CBN 1/4 S | RD 1/4WS | 2.20K J | |
| R911 | | 2233456195 | RES,CBN 1/4 S | RD 1/4WS | 560.00 J | |
| R912 | | 2233433095 | RES,CBN 1/4 S | RD 1/4WS | 33.00 J | |
| R913 | | 2233439195 | RES,CBN 1/4 S | RD 1/4WS | 390.00 J | |
| R914 | | 2233415395 | RES,CBN 1/4 S | RD 1/4WS | 15.00K J | |
| R915 | | 2233413195 | RES,CBN 1/4 S | RD 1/4WS | 130.00 J | |
| R916 | | 2235536203 | RES,MTL 2 | RS 2W | 3.60K J | |
| R917 | | 2235536203 | RES,MTL 2 | RS 2W | 3.60K J | |
| R918 | | 2237233095 | RES,MTL 1/4 S | RS 1/4WS | 33.00 J | |
| R919 | | 2237233095 | RES,MTL 1/4 S | RS 1/4WS | 33.00 J | |
| R921 | | 2233456195 | RES,CBN 1/4 S | RD 1/4WS | 560.00 J | |
| R922 | | 2233433095 | RES,CBN 1/4 S | RD 1/4WS | 33.00 J | |
| R923 | | 2233439195 | RES,CBN 1/4 S | RD 1/4WS | 390.00 J | |
| R924 | | 2233491295 | RES,CBN 1/4 S | RD 1/4WS | 9.10K J | |
| R925 | | 2233413195 | RES,CBN 1/4 S | RD 1/4WS | 130.00 J | |
| R926 | | 2235536203 | RES,MTL 2 | RS 2W | 3.60K J | |
| R927 | | 2235536203 | RES,MTL 2 | RS 2W | 3.60K J | |
| R928 | | 2237233095 | RES,MTL 1/4 S | RS 1/4WS | 33.00 J | |
| R929 | | 2237233095 | RES,MTL 1/4 S | RS 1/4WS | 33.00 J | |
| R931 | | 2233456195 | RES,CBN 1/4 S | RD 1/4WS | 560.00 J | |
| R932 | | 2233433095 | RES,CBN 1/4 S | RD 1/4WS | 33.00 J | |
| R933 | | 2233439195 | RES,CBN 1/4 S | RD 1/4WS | 390.00 J | |
| R934 | | 2233415395 | RES,CBN 1/4 S | RD 1/4WS | 15.00K J | |
| R935 | | 2233413195 | RES,CBN 1/4 S | RD 1/4WS | 130.00 J | |
| R936 | | 2235536203 | RES,MTL 2 | RS 2W | 3.60K J | |
| R937 | | 2235536203 | RES,MTL 2 | RS 2W | 3.60K J | |
| R938 | | 2237233095 | RES,MTL 1/4 S | RS 1/4WS | 33.00 J | |
| R939 | | 2237233095 | RES,MTL 1/4 S | RS 1/4WS | 33.00 J | |
| R940 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS | 100.00 J | |
| R941 | | 2232651095 | RES,CBN 1/2 | RD 1/2W | 51.00 J | |
| R942 | | 2235410395 | RES,MTL 1 | RS 1W | 10.00K J | |
| R943 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS | 100.00 J | |
| R944 | | 2232651095 | RES,CBN 1/2 | RD 1/2W | 51.00 J | |
| R945 | | 2235410395 | RES,MTL 1 | RS 1W | 10.00K J | |
| R946 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS | 100.00 J | |
| R947 | | 2232651095 | RES,CBN 1/2 | RD 1/2W | 51.00 J | |
| R948 | | 2235410395 | RES,MTL 1 | RS 1W | 10.00K J | |
| R949 | | 2233456195 | RES,CBN 1/4 S | RD 1/4WS | 560.00 J | |
| R950 | | 2233420295 | RES,CBN 1/4 S | RD 1/4WS | 2.00K J | |
| R951 | | 2233420295 | RES,CBN 1/4 S | RD 1/4WS | 2.00K J | |
| R953 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K J | |
| R954 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K J | |
| R955 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K J | |
| R956 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K J | |
| R962 | | 2232610295 | RES,CBN 1/2 | RD 1/2W | 1.00K J | |
| R963 | | 2232633495 | RES,CBN 1/2 | RD 1/2W | 330.00K J | |
| R970 | | 2233410095 | RES,CBN 1/4 S | RD 1/4WS | 10.00 J | |
| TP3 | | 2431400300 | TERMINAL | TERMINAL | | |
| U002 | | 2202103905 | PC BOARD | JD144K 94V0 CRT 110X140 V6.35 | | |
| VR901 | | 2225120291 | RES,SEMI FIX | 0.1W B 2K N | | |
| VR903 | | 2225120291 | RES,SEMI FIX | 0.1W B 2K N | | |
| VR904 | | 2225150391 | RES,SEMI FIX | 0.1W B 50K N TAPPING(V) | | |
| VR905 | | 2225150391 | RES,SEMI FIX | 0.1W B 50K N TAPPING(V) | | |
| VR906 | | 2225150391 | RES,SEMI FIX | 0.1W B 50K N TAPPING(V) | | |

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | | | REMARK |
|---|---|---|---|---|---|---|---|
| V901 | RA | 2407402300 | SOCKET | CRT SOCKET HPS0520-012401 | | | |
| V901 | RB | 2407402600 | SOCKET | CRT SOCKET SMK 6619 | | | |
| V901 | RC | 2407403000 | SOCKET | CRT SOCKET SFCBA0812A-SV FD | | | |

## MAIN P.C.BOARD

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C101 | | 2272133091 | CAP,CER | CC45CH | 33.000PF | 50V | J |
| C102 | | 2272133091 | CAP,CER | CC45CH | 33.000PF | 50V | J |
| C103 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C104 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C105 | | 2333647591 | CAP,MINI ELE 105'C | CE04W | 4.700UF | 50V | M |
| C106 | | 2333647591 | CAP,MINI ELE 105'C | CE04W | 4.700UF | 50V | M |
| C107 | | 2333647591 | CAP,MINI ELE 105'C | CE04W | 4.700UF | 50V | M |
| C108 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C110 | | 2333622591 | CAP,MINI ELE 105'C | CE04W | 2.200UF | 50V | M |
| C111 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C112 | | 2333647591 | CAP,MINI ELE 105'C | CE04W | 4.700UF | 50V | M |
| C113 | | 2333447691 | CAP,MINI ELE 105'C | CE04W | 47.000UF | 25V | M |
| C114 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C117 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C118 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C119 | | 2281122191 | CAP,CER | CK45B | 220.000PF | 50V | K |
| C120 | | 2281115191 | CAP,CER | CK45B | 150.000PF | 50V | K |
| C201 | | 2301122491 | CAP,MTL | CF93M | 0.220UF | 50V | J |
| C202 | | 2302210412 | CAP,MTL | CF93M | 0.100UF | 100V | K |
| C204 | | 2333847691 | CAP,MINI ELE 105'C | CE04W | 47.000UF | 100V | M |
| C206 | | 2291556391 | CAP,MYL | CQ92M | 0.056UF | 100V | K |
| C207 | | 2333322812 | CAP,MINI ELE 105'C | CE04W | 2200.000UF | 16V | M |
| C208 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C209 | | 2320647591 | CAP,ELE NP | CE04W | 4.700UF | 50V | M |
| C210 | | 2303210412 | CAP,MTL | CF93M | 0.100UF | 250V | K |
| C214 | | 2302222391 | CAP,MTL | CF93M | 0.022UF | 100V | K |
| C301 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C302 | | 2281133191 | CAP,CER | CK45B | 330.000PF | 50V | K |
| C303 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C401 | | 2302247391 | CAP,MTL | CF93M | 0.047UF | 100V | K |
| C402 | | 2291518291 | CAP,MYL | CQ92M | 1800.000PF | 100V | K |
| C403 | | 2295210391 | CAP,PPP | CQ93T | 0.010UF | 100V | G |
| C404 | | 2302210412 | CAP,MTL | CF93M | 0.100UF | 100V | K |
| C405 | | 2302247391 | CAP,MTL | CF93M | 0.047UF | 100V | K |
| C406 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C407 | | 2333422791 | CAP,MINI ELE 105'C | CE04W | 220.000UF | 25V | M |
| C408 | | 2291512391 | CAP,MYL | CQ92M | 0.012UF | 100V | K |
| C409 | | 2291510491 | CAP,MYL | CQ92M | 0.100UF | 100V | K |
| C410 | | 2301110491 | CAP,MTL | CF93M | 0.100UF | 50V | J |
| C411 | | 2281447291 | CAP,CER | CK45F | 4700.000PF | 50V | Z |
| C412 | | 2307122512 | CAP,MTL | CF93T | 2.200UF | 100V | J |
| C413 | | 2333410791 | CAP,MINI ELE 105'C | CE04W | 100.000UF | 25V | M |
| C414 | | 2333810691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 100V | M |
| C415 | | 2333447691 | CAP,MINI ELE 105'C | CE04W | 47.000UF | 25V | M |
| C416 | | 2334147591 | CAP,MINI ELE 105'C | CE04W | 4.700UF | 250V | M |
| C417 | | 2296656212 | CAP,PPP | CQ93T | 5600.000PF | 630V | J |
| C418 | | 2298851212 | CAP,PPP | CQ93T | 5100.000PF | 2000V | J |
| C419 | | 2283110291 | CAP,CER | CK45B | 1000.000PF | 500V | K |
| C420 | | 2307433412 | CAP,MTL | CF93T | 0.330UF | 400V | J |
| C421 | | 2307433412 | CAP,MTL | CF93T | 0.330UF | 400V | J |
| C422 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V | Z |
| C423 | | 2283610391 | CAP,CER | CK45E | 0.010UF | 500V | M |
| C424 | | 2333622591 | CAP,MINI ELE 105'C | CE04W | 2.200UF | 50V | M |
| C425 | | 2272115191 | CAP,CER | CC45CH | 150.000PF | 50V | J |
| C426 | | 2303210312 | CAP,MTL | CF93M | 0.010UF | 250V | K |
| C427 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V | M |
| C429 | | 2291510391 | CAP,MYL | CQ92M | 0.010UF | 100V | K |
| C430 | | 2333610591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 50V | M |
| C431 | | 2291510491 | CAP,MYL | CQ92M | 0.100UF | 100V | K |
| C432 | | 2333610591 | CAP,MINI ELE 105'C | CE04W | 1.000UF | 50V | M |
| C460 | | 2281122191 | CAP,CER | CK45B | 220.000PF | 50V | K |
| C801 | | 2300822401 | CAP,MTL | | 0.220UF | 275V | M |
| C803 | | 2287247212 | CAP,CER | CK45F | 4700.000PF | 250VAC | M |
| C804 | | 2287247212 | CAP,CER | CK45F | 4700.000PF | 250VAC | M |
| C805 | | 2287210312 | CAP,CER | CK45F | 0.010UF | 250VAC | M |
| C806 | | 2333447791 | CAP,MINI ELE 105'C | CE04W | 470.000UF | 25V | M |
| C807 | RA | 2285133191 | CAP,CER | CK45B | 330.000PF | 1KV | K |
| C807 | RB | 2285533191 | CAP,CER | CK45E | 330.000PF | 1KV | Z |

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | | | REMARK |
|---|---|---|---|---|---|---|---|
| C808 | | 2352522714 | CAP,ELE 85'C | CE69W | 220.000UF | 400V M | |
| C809 | | 2285510301 | CAP,CER | CK45E | 0.010UF | 1KV Z | |
| C811 | | 2333410791 | CAP,MINI ELE 105'C | CE04W | 100.000UF | 25V M | |
| C813 | | 2281410491 | CAP,CER | CK45F | 0.100UF | 50V Z | |
| C814 | | 2333822691 | CAP,MINI ELE 105'C | CE04W | 22.000UF | 100V M | |
| C815 | | 2281122291 | CAP,CER | CK45B | 2200.000PF | 50V K | |
| C816 | | 2281168191 | CAP,CER | CK45B | 680.000PF | 50V K | |
| C817 | | 2296233291 | CAP,PPP | CQ93T | 3300.000PF | 100V J | |
| C818 | | 2302210391 | CAP,MTL | CF93M | 0.010UF | 100V K | |
| C819 | | 2281110291 | CAP,CER | CK45B | 1000.000PF | 50V K | |
| C829 | | 2334010712 | CAP,MINI ELE 105'C | CE04W | 100.000UF | 200V M | |
| C832 | | 2333822712 | CAP,MINI ELE 105'C | CE04W | 220.000UF | 100V M | |
| C833 | | 2333410812 | CAP,MINI ELE 105'C | CE04W | 1000.000UF | 25V M | |
| C834 | | 2333433791 | CAP,MINI ELE 105'C | CE04W | 330.000UF | 25V M | |
| C836 | | 2333922691 | CAP,MINI ELE 105'C | CE04W | 22.000UF | 160V M | |
| C837 | | 2333410812 | CAP,MINI ELE 105'C | CE04W | 1000.000UF | 25V M | |
| C838 | | 2333410791 | CAP,MINI ELE 105'C | CE04W | 100.000UF | 25V M | |
| C839 | RA | 2285133191 | CAP,CER | CK45B | 330.000PF | 1KV K | |
| C839 | RB | 2285533191 | CAP,CER | CK45E | 330.000PF | 1KV Z | |
| C840 | RA | 2285110191 | CAP,CER | CK45B | 100.000PF | 1KV K | |
| C840 | RB | 2285510191 | CAP,CER | CK45E | 100.000PF | 1KV Z | |
| C841 | | 2333610691 | CAP,MINI ELE 105'C | CE04W | 10.000UF | 50V M | |
| C842 | | 2296247291 | CAP,PPP | CQ93T | 4700.000PF | 100V J | |
| C843 | | 2302210391 | CAP,MTL | CF93M | 0.010UF | 100V K | |
| C844 | | 2333622691 | CAP,MINI ELE 105'C | CE04W | 22.000UF | 50V M | |
| C846 | | 2303210412 | CAP,MTL | CF93M | 0.100UF | 250V K | |
| C847 | | 2296210291 | CAP,PPP | CQ93T | 1000.000PF | 100V J | |
| C848 | | 2296210291 | CAP,PPP | CQ93T | 1000.000PF | 100V J | |
| C849 | | 2302210412 | CAP,MTL | CF93M | 0.100UF | 100V K | |
| C851 | | 2281110291 | CAP,CER | CK45B | 1000.000PF | 50V K | |
| D101 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D102 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D103 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D104 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D105 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D106 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D107 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D108 | | 2363703200 | LED | L-53GD | | KINGBRIG | |
| D109 | | 2363703200 | LED | L-53GD | | KINGBRIG | |
| D110 | | 2363703200 | LED | L-53GD | | KINGBRIG | |
| D111 | | 2363703200 | LED | L-53GD | | KINGBRIG | |
| D112 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D113 | | 2363513295 | DIODE,ZENER | HZ6A-3 5.4-5.7V 0.5W | | HITACHI | |
| D114 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D115 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D116 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D120 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS 1.00K | | J | |
| D401 | RA | 2363512195 | DIODE,ZENER | HZ20-3 20.2-21.1V 0.5W | | HITACHI | |
| D401 | RB | 2363508095 | DIODE,ZENER | MTZJ22A | | ROHM | |
| D402 | RA | 2363218495 | DIODE,RECT | BYD33J | | PHILIPS | |
| D402 | RB | 2363207895 | DIODE,RECT | 1N4937 | | FAGOR | |
| D403 | RA | 2363514295 | DIODE,ZENER | HZ11B-3 10.7-11.1V 0.5W | | HITACH | |
| D403 | RB | 2363508195 | DIODE,ZENER | MTZ11B | | | |
| D404 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D405 | | 2363511795 | DIODE,ZENER | RD6.8EB3 6.66-7.01V 0.5W | | | |
| D406 | RA | 2363218495 | DIODE,RECT | BYD33J | | PHILIPS | |
| D406 | RB | 2363207895 | DIODE,RECT | 1N4937 | | FAGOR | |
| D407 | RA | 2363213912 | DIODE,RECT | FUF5407 3.0A 800V | | FAGOR | |
| D407 | RB | 2363213995 | DIODE,RECT | FUF5407 3.0A 800V | | FAGOR | |
| D408 | RA | 2363213800 | DIODE,RECT | 5TUZ47C TR 1US I 5A | | TOSHIBA | |
| D408 | RB | 2363214300 | DIODE,RECT | FMP-G2FS | | SANKEN | |
| D409 | | 2363216695 | DIODE,RECT | 1N5819 | | TSC | |
| D410 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D413 | | 2363207895 | DIODE,RECT | 1N4937 | | FAGOR | |
| D419 | RA | 2363218495 | DIODE,RECT | BYD33J | | PHILIPS | |
| D419 | RB | 2363207895 | DIODE,RECT | 1N4937 | | FAGOR | |
| D420 | RA | 2363218495 | DIODE,RECT | BYD33J | | PHILIPS | |
| D420 | RB | 2363207895 | DIODE,RECT | 1N4937 | | FAGOR | |
| D424 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D430 | | 2363600195 | DIODE,SWITCH | 1N4148 | | | |
| D801 | RA | 2363216812 | DIODE,RECT | 1N5406 | | TSC | |
| D801 | RB | 2363216295 | DIODE,RECT | 1N5406 3A 600V | | FAGOR | |
| D802 | RA | 2363216812 | DIODE,RECT | 1N5406 | | TSC | |
| D802 | RB | 2363216295 | DIODE,RECT | 1N5406 3A 600V | | FAGOR | |

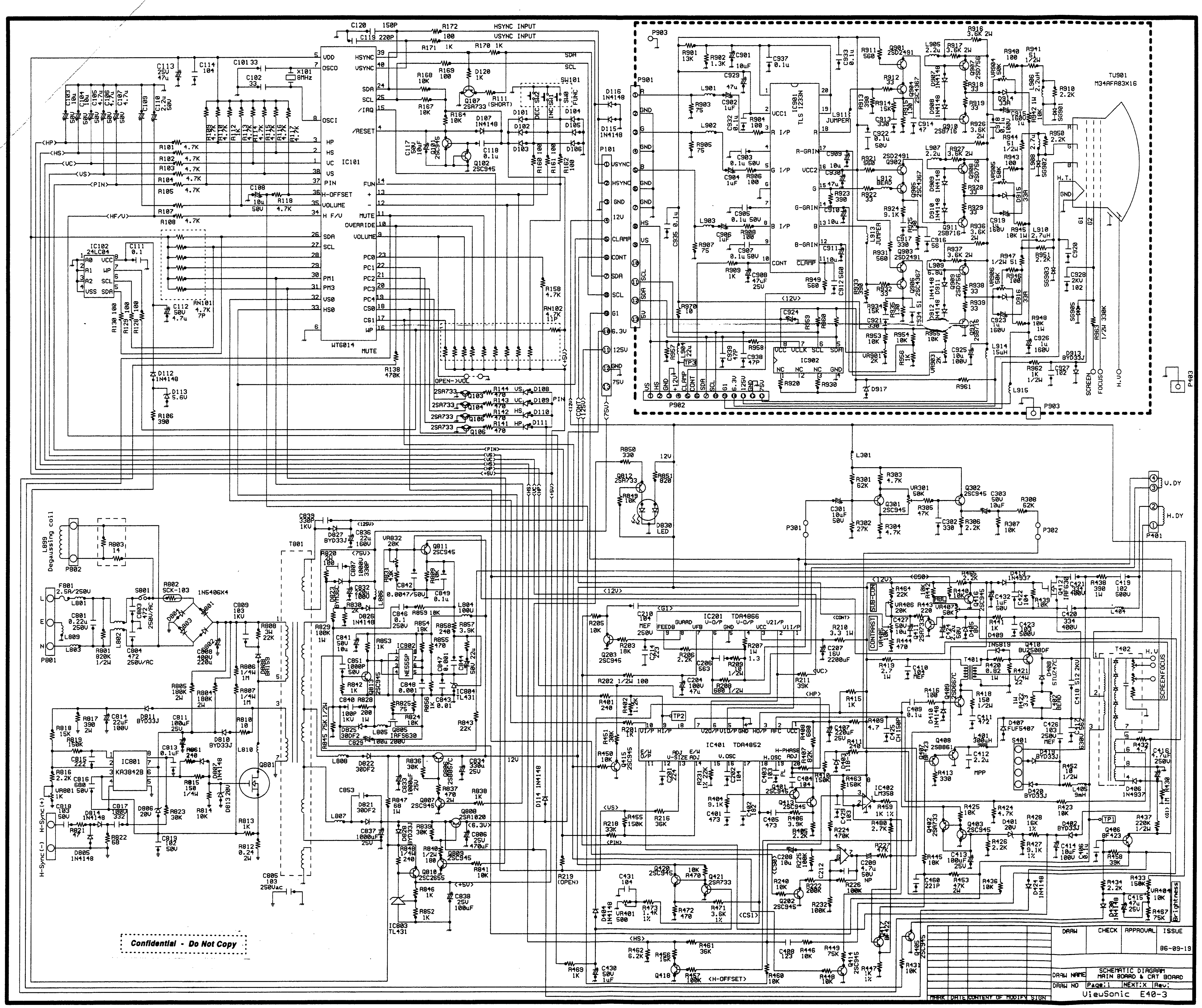
| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | REMARK |
|---|---|---|---|---|---|
| D803 | RA | 2363216812 | DIODE,RECT | 1N5406 | TSC |
| D803 | RB | 2363216295 | DIODE,RECT | 1N5406 3A 600V | FAGOR |
| D804 | RA | 2363216812 | DIODE,RECT | 1N5406 | TSC |
| D804 | RB | 2363216295 | DIODE,RECT | 1N5406 3A 600V | FAGOR |
| D805 | | 2363600195 | DIODE,SWITCH | 1N4148 | |
| D806 | RA | 2363512195 | DIODE,ZENER | HZ20-3 20.2-21.1V 0.5W | HITACHI |
| D806 | RB | 2363508095 | DIODE,ZENER | MTZJ22A | ROHM |
| D806 | RC | 2363507995 | DIODE,ZENER | MTZJ22B | ROHM |
| D807 | | 2363600195 | DIODE,SWITCH | 1N4148 | |
| D808 | | 2363201195 | DIODE,RECT | BA159 | FAGOR |
| D810 | RA | 2363218495 | DIODE,RECT | BYD33J | PHILIPS |
| D810 | RB | 2363207895 | DIODE,RECT | 1N4937 | FAGOR |
| D811 | RA | 2363218495 | DIODE,RECT | BYD33J | PHILIPS |
| D811 | RB | 2363207895 | DIODE,RECT | 1N4937 | FAGOR |
| D813 | RA | 2363512195 | DIODE,ZENER | HZ20-3 20.2-21.1V 0.5W | HITACHI |
| D813 | RB | 2363508095 | DIODE,ZENER | MTZJ22A | ROHM |
| D813 | RC | 2363507995 | DIODE,ZENER | MTZJ22B | ROHM |
| D814 | | 2363600195 | DIODE,SWITCH | 1N4148 | |
| D821 | RA | 2363214712 | DIODE,RECT | 30DF2 | IR |
| D821 | RB | 2363213012 | DIODE,RECT | MR852 3A 200V | FAGOR |
| D822 | RA | 2363214712 | DIODE,RECT | 30DF2 | IR |
| D822 | RB | 2363218012 | DIODE,RECT | HER304E6 | TSC |
| D823 | | 2363213912 | DIODE,RECT | FUF5407 3.0A 800V | FAGOR |
| D825 | RA | 2363214712 | DIODE,RECT | 30DF2 | IR |
| D825 | RB | 2363212900 | DIODE,RECT | BYM36C | PHILIPS |
| D825 | RC | 2363208712 | DIODE,RECT | 3JU41 | |
| D826 | | 2363600195 | DIODE,SWITCH | 1N4148 | |
| D827 | RA | 2363218495 | DIODE,RECT | BYD33J | PHILIPS |
| D827 | RB | 2363207895 | DIODE,RECT | 1N4937 | FAGOR |
| D828 | RA | 2363218495 | DIODE,RECT | BYD33J | PHILIPS |
| D828 | RB | 2363207895 | DIODE,RECT | 1N4937 | FAGOR |
| D830 | | 2363703400 | LED | KINGBRIGHT L-59YGW | |
| FS801 | | 2407213100 | HOLDER,FUSE | E-102 BSR-2A-H | |
| FS802 | | 2407213100 | HOLDER,FUSE | E-102 BSR-2A-H | |
| F801 | RA | 2213125254 | FUSE | BEL 5ST 2.5A 250V | |
| F801 | RB | 2213125200 | FUSE | BEL 5TT 2.5A 250V | |
| F801 | RC | 2213125208 | FUSE | LITTLE 21802.5 2.5A 250V | |
| F801 | RD | 2213125209 | FUSE | S506 2.5A/250V | BUSSMANN |
| IC101 | RA | 2365409700 | IC,DIGITAL | JD144K(V.S)JEAN005V | WELTREND |
| IC101 | RB | 2365411700 | IC,DIGITAL | JEAN 006/JD144 | WELTREND |
| IC102 | | 2365409000 | IC,DIGITAL | AT24CO4-10PC | ATMEL |
| IC201 | | 2365316900 | IC,LINEAR | TDA4866 | PHILIPS |
| IC401 | | 2365316800 | IC,LINEAR | TDA4852 | PHILIPS |
| IC402 | RA | 2365310800 | IC,LINEAR | LM358P | TI |
| IC402 | RB | 2365305100 | IC,LINEAR | LM358N | NATIONAL |
| IC801 | | 2365311500 | IC,LINEAR | KA3842B | SAMSUNG |
| IC802 | | 2365201710 | IC,MONO | NE555P | TI |
| IC803 | RA | 2365307391 | IC,LINEAR | TL431CLP | MOTOROLA |
| IC803 | RB | 2365319391 | IC,LINEAR | TL431CLP | TI |
| IC804 | RA | 2365307391 | IC,LINEAR | TL431CLP | MOTOROLA |
| IC804 | RB | 2365319391 | IC,LINEAR | TL431CLP | TI |
| L401 | | 2371105100 | COIL,CHOKE | JD144K 300UH 18X18 0.1*30 | |
| L402 | | 2379101495 | FERRITE CORE | 3.5X9X0.8 | |
| L404 | | 2385503700 | COIL,H LNR | JD144V2 13.47uH/OA 27.5T | |
| L405 | | 2371131500 | COIL,CHOKE | JD156H 9mH/2UEW0.2□ 440.5T | |
| L801 | | 2371110400 | COIL,CHOKE | HUA HJC- B | |
| L802 | | 2371154100 | COIL,CHOKE | TOKIN SS28V-08350(O) | |
| L803 | | 2371110400 | COIL,CHOKE | HUA HJC- B | |
| L804 | | 2372110195 | COIL,PEAKING | TDK SPT0305SA 100.000UH J | |
| L805 | | 2379101495 | FERRITE CORE | 3.5X9X0.8 | |
| L806 | | 2371104900 | COIL,CHOKE | JD144K 1.2mH 0.4X144.5T | |
| L807 | | 2379101495 | FERRITE CORE | 3.5X9X0.8 | |
| L808 | | 2379101495 | FERRITE CORE | 3.5X9X0.8 | |
| L809 | | 2379101900 | FERRITE CORE | CORE(u=1500)/1015#18 G&Y 270L | |
| L810 | | 2379101495 | FERRITE CORE | 3.5X9X0.8 | |
| L812 | | 2379102000 | FERRITE CORE | TR-11.8X7.3X15(J70) MAGNET | |
| P101 | | 2427412440 | WIRE HARNESS | 13P/13P 1007#26 L=300 B-1N | |
| P102 | | 2422325300 | WIRE,VINYL | UL1007#24(7M) 250L ORA K:K | |
| P301 | | 2422320600 | WIRE,VINYL | UL1007#24(TM) 200L BLU K:K | |
| P302 | | 2422315400 | WIRE,VINYL | UL1007#24(TM) 150L YEL K:K | |
| P401 | | 2404340003 | CONNECTOR | LEOCO 1086 4PIN P=8.0 | |
| P402 | | 2427307003 | LUG W/WIRE | LRTC4000/LFTC187F 1015#22 180L | |
| P403 | | 2404340000 | CONNECTOR | LEOCO 1086 1PIN P=7.5 | |
| P404 | | 2427307003 | LUG W/WIRE | LRTC4000/LFTC187F 1015#22 180L | |

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | REMARK |
|---|---|---|---|---|---|
| P405 | | 2427307005 | LUG W/WIRE | LYTC43/LFTC187F 1015#22 300L | |
| P406 | | 2427309006 | LUG W/WIRE | 9193TCB W 1007#22 450L | |
| P407 | | 2427309009 | LUG W/WIRE | B1812T2B W 1007#18 2T&300L | |
| P408 | | 2427307004 | LUG W/WIRE | 9193TCB/LFTC187F 1015#22 150L | |
| P801 | RA | 2407411400 | SOCKET | POWER SOCKET SC-9R SUPERCPN | |
| P801 | RB | 2407411300 | SOCKET | POWER SOCKET SS-7B-1C RONGFONG | |
| P801 | RC | 2407411200 | SOCKET | POWER SOCKRT 7014 I-SHENG | |
| P802 | | 2404340001 | CONNECTOR | LEOCO 1086 2PIN P=10 | |
| Q101 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q101 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q102 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q102 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q103 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q103 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q104 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q104 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q105 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q105 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q106 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q106 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q107 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q107 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q108 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q108 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q108 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q202 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q202 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q202 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q203 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q203 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q203 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q301 | | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q302 | | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q401 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q401 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q401 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q402 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q402 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q403 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q403 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q403 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q405 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q405 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q405 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q406 | | 2361211291 | XISTOR,PNP A | BF423 | TOSHIBA |
| Q407 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q407 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q408 | | 2361210400 | XISTOR,PNP A | 2SB861WC | HITACHI |
| Q409 | | 2361401991 | XISTOR,NPN A | 2SD667(C) | HITACHI |
| Q410 | RA | 2361302800 | XISTOR,NPN R | BU2508DF | PHILIPS |
| Q410 | RB | 2361316400 | XISTOR,NPN R | BU2508DX | PHILIPS |
| Q411 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q411 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q412 | RA | 2361601800 | FET,N-CH | IRF630 | SAMSUNG |
| Q412 | RB | 2361604700 | FET,N-CH | FS10UM-5 | MITSUBIS |
| Q412 | RC | 2361603100 | FET,N-CH | 2SK2134 | NEC |
| Q412 | RD | 2361605700 | FET,N-CH | BUZ32 | SIEMENS |
| Q413 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q413 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q413 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q414 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q414 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q415 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q415 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q416 | RA | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q416 | RB | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q417 | | 2361314791 | XISTOR,NPN R | BF422 | TOSHIBA |
| Q418 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q418 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q418 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q420 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q420 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q421 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q421 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | REMARK |
|---|---|---|---|---|---|
| Q801 | RA | 2361605000 | FET,N-CH | 2SK2645-01M | FUJI |
| Q801 | RB | 2361604300 | FET,N-CH | FS7KM-12 | MITSUBIS |
| Q805 | RA | 2361601800 | FET,N-CH | IRF630 | SAMSUNG |
| Q805 | RB | 2361604700 | FET,N-CH | FS10UM-5 | MITSUBIS |
| Q805 | RC | 2361604200 | FET,N-CH | IRFS630 | SAMSUNG |
| Q805 | RD | 2361604600 | FET,N-CH | FS10KM-5 | MITSUBIS |
| Q806 | RA | 2361200600 | XISTOR,PNP A | 2SB857(C) | HITACHI |
| Q806 | RB | 2361211000 | XISTOR,PNP A | 2SB857C | HI-SINCE |
| Q807 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q807 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q807 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q808 | | 2361111191 | XISTOR,PNP R | 2SA1020(Y) | TOSHIBA |
| Q809 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q809 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q809 | RC | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q810 | | 2361303291 | XISTOR,NPN R | 2SC2655(Y) | TOSHIBA |
| Q811 | RA | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| Q811 | RB | 2361315991 | XISTOR,NPN R | H945P | HITACHI |
| Q812 | RA | 2361111491 | XISTOR,PNP R | 2PA733P | PHILIPS |
| Q812 | RB | 2361100491 | XISTOR,PNP R | 2SA733(P) | NEC |
| Q813 | RA | 2361316191 | XISTOR,NPN R | 2PC945P | PHILIPS |
| Q813 | RB | 2361302591 | XISTOR,NPN R | 2SC945(P) | NEC |
| RN101 | | 2259647207 | RES,NETWORKS | RG PITCH=2.54 7P 1/8W 4.7K J | |
| RN102 | | 2259647211 | RES,NETWORKS | RG PITCH=2.54 11P 1/8W 4.7K J | |
| R101 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R102 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R103 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R104 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R105 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R106 | | 2233439195 | RES,CBN 1/4 S | RD 1/4WS 390.00 | J |
| R108 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R109 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R110 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R112 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS 1.00K | J |
| R114 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R115 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R116 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R117 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R118 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R119 | | 2233422295 | RES,CBN 1/4 S | RD 1/4WS 2.20K | J |
| R120 | | 2233418195 | RES,CBN 1/4 S | RD 1/4WS 180.00 | J |
| R128 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS 100.00 | J |
| R129 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS 100.00 | J |
| R130 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS 100.00 | J |
| R138 | | 2233447495 | RES,CBN 1/4 S | RD 1/4WS 470.00K | J |
| R141 | | 2233447195 | RES,CBN 1/4 S | RD 1/4WS 470.00 | J |
| R142 | | 2233447195 | RES,CBN 1/4 S | RD 1/4WS 470.00 | J |
| R143 | | 2233447195 | RES,CBN 1/4 S | RD 1/4WS 470.00 | J |
| R144 | | 2233447195 | RES,CBN 1/4 S | RD 1/4WS 470.00 | J |
| R158 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS 4.70K | J |
| R160 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS 100.00 | J |
| R161 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS 100.00 | J |
| R162 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS 100.00 | J |
| R164 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS 10.00K | J |
| R167 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS 10.00K | J |
| R168 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS 10.00K | J |
| R169 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS 100.00 | J |
| R170 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS 1.00K | J |
| R171 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS 1.00K | J |
| R172 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS 100.00 | J |
| R201 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS 1.00K | J |
| R202 | | 2232610195 | RES,CBN 1/2 | RD 1/2W 100.00 | J |
| R203 | | 2233418395 | RES,CBN 1/4 S | RD 1/4WS 18.00K | J |
| R205 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS 10.00K | J |
| R206 | | 2239220015 | RES,PRE 1/4 S | RN 1/4WS 2.00K | F |
| R207 | | 2235412995 | RES,MTL 1 | RS 1W 1.20 | J |
| R208 | | 2232647195 | RES,CBN 1/2 | RD 1/2W 470.00 | J |
| R209 | | 2232610095 | RES,CBN 1/2 | RD 1/2W 10.00 | J |
| R210 | | 2235433995 | RES,MTL 1 | RS 1W 3.30 | J |
| R211 | | 2233430395 | RES,CBN 1/4 S | RD 1/4WS 30.00K | J |
| R216 | | 2233436395 | RES,CBN 1/4 S | RD 1/4WS 36.00K | J |
| R218 | | 2233433395 | RES,CBN 1/4 S | RD 1/4WS 33.00K | J |
| R222 | | 2233420495 | RES,CBN 1/4 S | RD 1/4WS 200.00K | J |
| R224 | | 2233447495 | RES,CBN 1/4 S | RD 1/4WS 470.00K | J |

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | | REMARK |
|---|---|---|---|---|---|---|
| R225 | | 2233410495 | RES,CBN 1/4 S | RD 1/4WS | 100.00K | J |
| R226 | | 2233410495 | RES,CBN 1/4 S | RD 1/4WS | 100.00K | J |
| R227 | | 2233447395 | RES,CBN 1/4 S | RD 1/4WS | 47.00K | J |
| R231 | | 2239222025 | RES,PRE 1/4 S | RN 1/4WS | 22.00K | F |
| R232 | | 2233410495 | RES,CBN 1/4 S | RD 1/4WS | 100.00K | J |
| R240 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R301 | | 2233462395 | RES,CBN 1/4 S | RD 1/4WS | 62.00K | J |
| R302 | | 2233427395 | RES,CBN 1/4 S | RD 1/4WS | 27.00K | J |
| R303 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS | 4.70K | J |
| R304 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS | 4.70K | J |
| R305 | | 2233447395 | RES,CBN 1/4 S | RD 1/4WS | 47.00K | J |
| R306 | | 2233422295 | RES,CBN 1/4 S | RD 1/4WS | 2.20K | J |
| R307 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R308 | | 2233462395 | RES,CBN 1/4 S | RD 1/4WS | 62.00K | J |
| R401 | | 2233424195 | RES,CBN 1/4 S | RD 1/4WS | 240.00 | J |
| R402 | | 2233412295 | RES,CBN 1/4 S | RD 1/4WS | 1.20K | J |
| R404 | | 2233491295 | RES,CBN 1/4 S | RD 1/4WS | 9.10K | J |
| R405 | | 2233422295 | RES,CBN 1/4 S | RD 1/4WS | 2.20K | J |
| R406 | | 2233439295 | RES,CBN 1/4 S | RD 1/4WS | 3.90K | J |
| R407 | | 2233482395 | RES,CBN 1/4 S | RD 1/4WS | 82.00K | J |
| R408 | | 2233468195 | RES,CBN 1/4 S | RD 1/4WS | 680.00 | J |
| R409 | | 2233447995 | RES,CBN 1/4 S | RD 1/4WS | 4.70 | J |
| R410 | | 2233415495 | RES,CBN 1/4 S | RD 1/4WS | 150.00K | J |
| R411 | | 2233424195 | RES,CBN 1/4 S | RD 1/4WS | 240.00 | J |
| R413 | | 2233433195 | RES,CBN 1/4 S | RD 1/4WS | 330.00 | J |
| R415 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K | J |
| R416 | | 2233410195 | RES,CBN 1/4 S | RD 1/4WS | 100.00 | J |
| R418 | | 2232615195 | RES,CBN 1/2 | RD 1/2W | 150.00 | J |
| R419 | | 2235427995 | RES,MTL 1 | RS 1W | 2.70 | J |
| R420 | | 2235482895 | RES,MTL 1 | RS 1W | 0.82 | J |
| R421 | | 2233422095 | RES,CBN 1/4 S | RD 1/4WS | 22.00 | J |
| R422 | | 2235433995 | RES,MTL 1 | RS 1W | 3.30 | J |
| R423 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R424 | | 2233447295 | RES,CBN 1/4 S | RD 1/4WS | 4.70K | J |
| R425 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R426 | | 2233422295 | RES,CBN 1/4 S | RD 1/4WS | 2.20K | J |
| R427 | | 2239291015 | RES,PRE 1/4 S | RN 1/4WS | 9.10K | F |
| R428 | | 2239216025 | RES,PRE 1/4 S | RN 1/4WS | 16.00K | F |
| R430 | | 2233410595 | RES,CBN 1/4 S | RD 1/4WS | 1.00M | J |
| R431 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R432 | | 2233447995 | RES,CBN 1/4 S | RD 1/4WS | 4.70 | J |
| R433 | | 2233415495 | RES,CBN 1/4 S | RD 1/4WS | 150.00K | J |
| R434 | | 2233422295 | RES,CBN 1/4 S | RD 1/4WS | 2.20K | J |
| R436 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R437 | | 2232622495 | RES,CBN 1/2 | RD 1/2W | 220.00K | J |
| R438 | | 2235439195 | RES,MTL 1 | RS 1W | 390.00 | J |
| R439 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R440 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R441 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K | J |
| R442 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R443 | | 2233422195 | RES,CBN 1/4 S | RD 1/4WS | 220.00 | J |
| R444 | | 2233447195 | RES,CBN 1/4 S | RD 1/4WS | 470.00 | J |
| R445 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R446 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R447 | | 2239210015 | RES,PRE 1/4 S | RN 1/4WS | 1.00K | F |
| R448 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R449 | | 2233475395 | RES,CBN 1/4 S | RD 1/4WS | 75.00K | J |
| R450 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R451 | | 2233430395 | RES,CBN 1/4 S | RD 1/4WS | 30.00K | J |
| R452 | | 2232610095 | RES,CBN 1/2 | RD 1/2W | 10.00 | J |
| R453 | | 2235547303 | RES,MTL 2 | RS 2W | 47.00K | J |
| R455 | | 2233415495 | RES,CBN 1/4 S | RD 1/4WS | 150.00K | J |
| R456 | | 2233415395 | RES,CBN 1/4 S | RD 1/4WS | 15.00K | J |
| R457 | | 2233410495 | RES,CBN 1/4 S | RD 1/4WS | 100.00K | J |
| R458 | | 2233439395 | RES,CBN 1/4 S | RD 1/4WS | 39.00K | J |
| R459 | | 2239210015 | RES,PRE 1/4 S | RN 1/4WS | 1.00K | F |
| R460 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R461 | | 2233436395 | RES,CBN 1/4 S | RD 1/4WS | 36.00K | J |
| R462 | | 2233462295 | RES,CBN 1/4 S | RD 1/4WS | 6.20K | J |
| R463 | | 2233415495 | RES,CBN 1/4 S | RD 1/4WS | 150.00K | J |
| R464 | | ~~2233422395~~ | ~~RES,CBN 1/4 S~~ | ~~RD 1/4WS~~ | ~~2230395~~ | RES,CBN 1/4 S RD 1/4WS 30.00K J |
| R465 | | 2233422295 | RES,CBN 1/4 S | RD 1/4WS | 2.20K | J |
| R467 | | 2233475395 | RES,CBN 1/4 S | RD 1/4WS | 75.00K | J |
| R469 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K | J |

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | | REMARK |
|---|---|---|---|---|---|---|
| R470 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R471 | | 2239236015 | RES,PRE 1/4 S | RN 1/4WS | 3.60K | F |
| R472 | | 2233447195 | RES,CBN 1/4 S | RD 1/4WS | 470.00 | J |
| R473 | | 2239214015 | RES,PRE 1/4 S | RN 1/4WS | 1.40K | F |
| R480 | | 2233427295 | RES,CBN 1/4 S | RD 1/4WS | 2.70K | J |
| R801 | | 2232682495 | RES,CBN 1/2 | RD 1/2W | 820.00K | J |
| R802 | RA | 2229201212 | THERMISTOR,PTH | SCK-103 10+-20% 3A | | THINKING |
| R802 | RB | 2229400612 | THERMISTOR,NTC | NTC UPPERMOST N10SP010***-K2 | | |
| R803 | | 2229301300 | THERMISTOR,PTC | PTC 9+-20% PCA9ROS UPPERMOST | | |
| R804 | | 2235518403 | RES,MTL 2 | RS 2W | 180.00K | J |
| R805 | | 2235518403 | RES,MTL 2 | RS 2W | 180.00K | J |
| R806 | | 2233410595 | RES,CBN 1/4 S | RD 1/4WS | 1.00M | J |
| R807 | | 2233410595 | RES,CBN 1/4 S | RD 1/4WS | 1.00M | J |
| R808 | | 2235622303 | RES,MTL 3 | RS 3W | 22.00K | J |
| R809 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R810 | | 2233410095 | RES,CBN 1/4 S | RD 1/4WS | 10.00 | J |
| R812 | | 2235524803 | RES,MTL 2 | RS 2W | 0.24 | J |
| R813 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K | J |
| R814 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R815 | | 2233415195 | RES,CBN 1/4 S | RD 1/4WS | 150.00 | J |
| R816 | | 2233422295 | RES,CBN 1/4 S | RD 1/4WS | 2.20K | J |
| R817 | | 2235539103 | RES,MTL 2 | RS 2W | 390.00 | J |
| R818 | | 2233415395 | RES,CBN 1/4 S | RD 1/4WS | 15.00K | J |
| R819 | | 2233415495 | RES,CBN 1/4 S | RD 1/4WS | 150.00K | J |
| R820 | | 2235510103 | RES,MTL 2 | RS 2W | 100.00 | J |
| R821 | | 2233447095 | RES,CBN 1/4 S | RD 1/4WS | 47.00 | J |
| R822 | | 2233468095 | RES,CBN 1/4 S | RD 1/4WS | 68.00 | J |
| R823 | | 2233430395 | RES,CBN 1/4 S | RD 1/4WS | 30.00K | J |
| R824 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R825 | | 2233475095 | RES,CBN 1/4 S | RD 1/4WS | 75.00 | J |
| R828 | | 2235420195 | RES,MTL 1 | RS 1W | 200.00 | J |
| R829 | | 2235410495 | RES,MTL 1 | RS 1W | 100.00K | J |
| R830 | | 2233420295 | RES,CBN 1/4 S | RD 1/4WS | 2.00K | J |
| R831 | | 2233443395 | RES,CBN 1/4 S | RD 1/4WS | 43.00K | J |
| R836 | | 2233430395 | RES,CBN 1/4 S | RD 1/4WS | 30.00K | J |
| R837 | | 2235547103 | RES,MTL 2 | RS 2W | 470.00 | J |
| R838 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K | J |
| R839 | | 2233430395 | RES,CBN 1/4 S | RD 1/4WS | 30.00K | J |
| R840 | | 2232618195 | RES,CBN 1/2 | RD 1/2W | 180.00 | J |
| R841 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R842 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K | J |
| R843 | | 2233422395 | RES,CBN 1/4 S | RD 1/4WS | 22.00K | J |
| R845 | | 2232675395 | RES,CBN 1/2 | RD 1/2W | 75.00K | J |
| R846 | | 2239210015 | RES,PRE 1/4 S | RN 1/4WS | 1.00K | F |
| R847 | | 2235468095 | RES,MTL 1 | RS 1W | 68.00 | J |
| R848 | | 2233424195 | RES,CBN 1/4 S | RD 1/4WS | 240.00 | J |
| R849 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R850 | | 2233433195 | RES,CBN 1/4 S | RD 1/4WS | 330.00 | J |
| R851 | | 2233482195 | RES,CBN 1/4 S | RD 1/4WS | 820.00 | J |
| R852 | | 2239210015 | RES,PRE 1/4 S | RN 1/4WS | 1.00K | F |
| R853 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K | J |
| R854 | | 2233418395 | RES,CBN 1/4 S | RD 1/4WS | 18.00K | J |
| R855 | | 2233447195 | RES,CBN 1/4 S | RD 1/4WS | 470.00 | J |
| R856 | | 2233410295 | RES,CBN 1/4 S | RD 1/4WS | 1.00K | J |
| R857 | | 2233439295 | RES,CBN 1/4 S | RD 1/4WS | 3.90K | J |
| R858 | | 2233424195 | RES,CBN 1/4 S | RD 1/4WS | 240.00 | J |
| R859 | | 2233410395 | RES,CBN 1/4 S | RD 1/4WS | 10.00K | J |
| R861 | | 2233424195 | RES,CBN 1/4 S | RD 1/4WS | 240.00 | J |
| SW101 | | 2403701200 | SWITCH,PU-TC | SKHH33P920-SV | | FORWARD |
| S401 | RA | 2406200500 | SWITCH,LEVER | EVQ-ROB | | PANASONIC |
| S401 | RB | 2406200600 | SWITCH,LEVER | BGL-0131 | | HUA-JIE |
| S401 | RC | 2406200700 | SWITCH,LEVER | TLF1X3 | | HORNG CHIN |
| S801 | RA | 2403104400 | SWITCH,PUSH | SFDLB11C7u | | FORWARD |
| S801 | RB | 2403104500 | SWITCH,PUSH | SY16-12-2(u99S2)/T | | NOBLE |
| S801 | RC | 2403104800 | SWITCH,PUSH | ESB82137V | | PANASONI |
| TP2 | | 2431400300 | TERMINAL | TERMINAL | | |
| TP4 | | 2431400300 | TERMINAL | TERMINAL | | |
| T401 | | 2385502100 | COIL,H LNR | LS-BL942-008 | | |
| T402 | RA | 2385205700 | FBT | ETF-39L2029AZ | | MATSUSHI |
| T402 | RB | 2385205900 | FBT | FEA583 | | SAMPO |
| T402E | | 2097400301 | EYELET | BSS3-1/2H T=0.25 SN 3□□ | | |
| T801 | | 2374205900 | XFORMER,POWR | JD144K 400UH 0.29 OHM | | |
| T801E | | 2097400301 | EYELET | BSS3-1/2H T=0.25 SN 3□□ | | |
| U001 | | 2202104009 | PC BOARD | JD144K MAIN 94V0 296X245V10.25 | | |


IC101 WT6014
IC102 24LC04
IC901 TLS 1233N
IC902
TU901 M34AFA83X16
IC201 TDA4866
IC401 TDA4852
IC402 LM358
IC801 KA3842B
IC802 NE555P
IC803 TL431
IC804 TL431
T801
T401
T402
HSYNC INPUT
VSYNC INPUT
L899 Degaussing coil
H-Sync(+)
H-Sync(-)
V.DY
H.DY
SCREEN
FOCUS
H.V
CONTRAST
SUB-CON
Brightness
Confidential - Do Not Copy
DRAW
CHECK
APPROVAL
ISSUE
86-09-19
DRAW NAME
SCHEMATIC DIAGRAM
MAIN BOARD & CRT BOARD
DRAW NO
Page:1
NEXT:X
Rev:
ViewSonic E40-3
MARK
DATE
CONTENT OF MODIFY
SIGN

| LOC NO. | SOURCE | PART NO. | DESCRIPTION | SPEC. | REMARK |
|---|---|---|---|---|---|
| VR301 | | 2225150390 | RES,SEMI FIX | 0.1W B 50K N | |
| VR401 | | 2225150191 | RES,SEMI FIX | 0.1W B 500 N TAPPING(V) | |
| VR404 | | 2220112021 | RES,V CBN 9 | RK09K1110619(SV) 0.05W 10KB M | |
| VR405 | | 2220112022 | RES,V CBN 9 | RK09K1110471(SV) 0.05W 10KB M | |
| VR406 | | 2225120391 | RES,SEMI FIX | 0.1W B 20K N TAPPING(V) | |
| VR407 | | 2225150391 | RES,SEMI FIX | 0.1W B 50K N TAPPING(V) | |
| VR801 | | 2225110291 | RES,SEMI FIX | 0.1W B 1K N TAPPING(V) | |
| VR832 | | 2225120390 | RES,SEMI FIX | 0.1W B 20K N | |
| X101 | | 2369102701 | XTAL,OSC | XTAL 8.0MHZ 30P/0.1mW | |

## OTHERS

| | | | | |
|---|---|---|---|---|
| P906 | | 242750103~~6~~29 | I/O CABLE | D-SUB 15P MALE~~/JST12P-1800L~~ /JST 12P DDC |
| GN901 | | 2420102200 | CRT WIRE | JD144J 0.12/64C 670L |
| L899 | | 2385404300 | COIL,ERASE | JD144K MPR2 0.4X60T 940L |
| TU901 | | 2211014100 | CRT ASSY | M34AFA83X16 U CPT |
| PD801 | | 2427130003 | ~~POWER CORD~~ | ~~SVT 18/3C WHITE 1.83M~~ ~~(WALL TYPE)~~ |
| ~~PD801~~ | | ~~2427130014~~ | ~~POWER CORD~~ | ~~H05VV-F3*0.75 VDE WALL 1.83M~~ ~~(EUROPE)~~ |
| ~~PD801~~ | | ~~2427123008~~ | ~~POWER CORD~~ | ~~ISO11 H05VV-F 0.75X3 1830L W 1~~ POWER CORD SVT 18/3C GRAY 1.5M (USA WALL TYPE) |
| PD801 | | 2427114003 | POWER CORD | 3GX0.75MM 6A/250V 1.5M VDE (EU WALL TYPE) |
| PD801 | | 2427125001 | POWER CORD | H05VV-F 0.75/3C 2468 GRAY 1.5M (PC TYPE) |

| LOC NO | OLD | NEW | ECR NO | Cut-In Date | Cut-In S/N |
|---|---|---|---|---|---|
| R464 | 2233422395 | 2233430295 | VSC-00054 | 26/1/99 | 6A90500753 |
| P906 | 2427501036 | 2427501029 | VSC-00057 | 24/1/99 | 6A90500001 |
| PD801 | 2427130003 | 2427130001 | VSC-00057 | 24/1/99 | 6A90500001 |
| PD801 | 2427130014 | 2427114003 | VSC-00061 | 26/1/99 | 6A90500001 |
| PD801 | 2427123008 | 2427125001 | VSC-00061 | 26/1/99 | 6A90500001 |
| | | | | | |